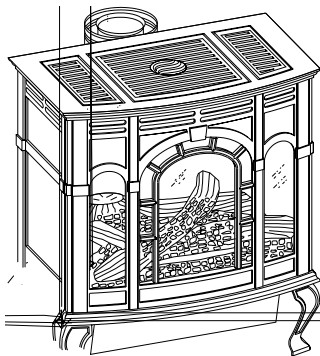




INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL



CAST IRON DIRECT VENT FIREPLACE MODEL CIDV-30-7



EFFECTIVE DATE
AUGUST, 2000

This appliance may be installed in an aftermarket permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

FOR YOUR SAFETY: What to do if you smell gas:

- Do not touch any electrical switches
- Do not try to light any appliance.
- Do not use the phone in your building.
- Immediately call your gas supplier from a neighbor's phone.
- Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.

Cet appareil peut être installé dans une maison préfabriquée (mobile) déjà installée à demeure si les règlements locaux le permettent.

Cet appareil doit être utilisé uniquement avec les types de gaz indiqués sur la plaque signalétique. Ne pas l'utiliser avec d'autres gaz sauf si un kit de conversion certifié est installé.

AVERTISSEMENT: Quiconque ne respecte pas à la lettre les instructions dans le présent manuel risque de déclencher un incendie ou une explosion entraînant des dommages matériels, des lésions corporelles ou la perte de vies humaines.

POUR VOTRE SÉCURITÉ: Que faire si vous sentez une odeur de gaz:

- Ne pas tenter d'allumer d'appareil.
- Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous vous trouvez.
- Évacuez la pièce, le bâtiment ou la zone.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.

AVERTISSEMENT: Une installation, un réglage, une modification, un entretien ou une maintenance incorrects peuvent entraîner des dommages matériels, des lésions corporelles ou la perte de vies humaines. Consulter le manuel des usagers fourni avec ce générateur d'air chaud.

Instructions to Installer

1. Installer must leave instruction manual with owner after installation.
2. Installer must have owner fill out and mail warranty card supplied with appliance.
3. Installer should show owner how to start and operate appliance and thermostat.

WARNING: Any change to this appliance or its control can be dangerous. This is a heating appliance and any panel, door or guard removed for servicing an appliance must be replaced prior to operating the appliance.

General Information

This appliance is design certified in accordance with American National Standard/CSA Standard ANSI Z21.88-1998/CSA 2.33-M98 by the American Gas Association and Canadian Gas Association as a Direct Vent Fireplace and should be installed according to these instructions.

The efficiency rating of this appliance is a product thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

Notice During initial firing of this unit, its paint will bake out and smoke will occur. To prevent triggering of smoke alarms, ventilate the room in which the unit is installed.

WARNING: Do not operate appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.

WARNING: If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

Appliance must not be connected to a chimney flue that is servicing a separate solid-fuel burning appliance.

Attention: All vent runs must have a minimum **VERTICAL** rise of two feet. If the vent run is directly behind the appliance, you must attach Simpson Dura-Vent 36" snorkel, part number SD-981 on the exterior of the building. See Venting Requirements, page 11.

Specifications

Model	CIDV-30
Input BTU/HR (KW/H) Max (LP/NAT)	30,000 (8.7)
BTU/HR (KW/H) Min. LP	22,000 (6.4)
BTU/HR (KW/H) Min. Nat.	19,500 (5.7)
Height	27 3/4" (70.5cm)
Width	25 1/2" (64.8cm)
Depth	23" (58.4cm)
Gas Inlet (Pipe)	1/2" (13mm)
Floor to top of collar on vertical position of Vent Elbow	27 5/8" (70.2cm)
Floor to center of collar on horizontal position of Vent Elbow	24 3/32" (61.2cm)
Floor to Center of 90° elbow with a 24" length of pipe (see Figure 5)	55 1/2" (141cm)

Stove Casting (Must be ordered with Firebox.)

CIFB-1	Flat Black
CIPB-1	Porcelain Black
CIPG-1	Porcelain Green
CIPS-1	Porcelain Sand
CIPN-1	Porcelain Navy
CIPR-1	Porcelain Red

Accessories

GWSG-T	750 Millivolt Wall Thermostat
DVKH-1	Direct Vent Kit for Horizontal Run (Includes DVKA-1 Adapter)
DVKV-1	Direct Vent Kit for Vertical Run (Includes DVKA-1 Adapter)
DVKA-1	Direct Vent Kit Adapter
FRBC-1	Battery Operated Remote Control
FRBTC-1	Battery Operated Remote Control w/Thermostat
FREC-1	Electric Remote Control
FWS-1	Wall Switch
CIB-2	Automatic Blower

Stone Inlay Replaces Standard Grille Top

CII-2	Stone Inlay	Empress Green
CII-3	Stone Inlay	Hunan Jade
CII-4	Stone Inlay	Gray Botticino
CII-5	Stone Inlay	Azul
CII-6	Stone Inlay	Salome
CII-7	Stone Inlay	Black Swan

THIS IS A HEATING APPLIANCE

- Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance.
- Clothing or other flammable material should not be placed on or near the appliance.
- Surveiller les enfants. Garder les vêtements, les meubles, l'essence ou autres liquides à vapeur inflammables loin de l'appareil.
- Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance.
- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service person
- Keep burner and control compartment clean.
- Vent cap hot while furnace is in operation.
- Installation and repair should be done by a **QUALIFIED SERVICE PERSON**. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passage-ways of the appliance be kept clean.
- S'assurer que le brûleur et le compartiment des commandes sont propres. Voir les instructions d'installation et d'utilisation qui accompagnent l'appareil.
- **DO NOT** put anything around the furnace that will obstruct the flow of combustion and ventilation air.
- **DO** keep the appliance area clear and free from combustible material, gasoline and other flammable vapors and liquids.
- **DO** examine venting system periodically and replace damaged parts.
- **CAUTION:** The glass used in your heater is a special high temperature ceramic glass. If the glass is cracked or damaged in any way, it should be replaced only with a complete glass frame assembly from Empire. See parts list on Page 26 for ordering.
- **DO** make a periodic visual check of pilot and burner. Clean and replace damaged parts.
- **DO NOT** use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
- Ne pas se servir de cet appareil s'il a été plongé dans l'eau, complètement ou en partie. Appeler un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.
- Under no circumstances should any solid fuels (wood, coal, paper or cardboard, etc.) be used in this appliance.

SAFETY INFORMATION FOR USERS OF LP-GAS

Propane (LP-Gas) is a flammable gas which can cause fires and explosions. In its natural state, propane is odorless and colorless. You may not know all the following safety precautions which can protect both you and your family from an accident. Read them carefully now, then review them point

by point with the members of your household. Someday when there may not be a minute to lose, everyone's safety will depend on knowing exactly what to do. If, after reading the following information, you feel you still need more information, please contact your gas supplier.

LP-GAS WARNING ODOR

If a gas leak happens, you should be able to smell the gas because of the odorant put in the LP-Gas. That's your signal to go into immediate action!

- Do not operate electric switches, light matches, use your phone. Do not do anything that could ignite the gas.
- Get everyone out of the building, vehicle, trailer, or area. Do that IMMEDIATELY.
- Close all gas tank or cylinder supply valves.
- LP-Gas is heavier than air and may settle in low areas such as basements. When you have reason to suspect a gas leak, keep out of basements and other low areas. Stay out until firefighters declare them to be safe.
- Use your neighbor's phone and call a trained LP-Gas service person and the fire department. Even though you may not continue to smell gas, do not turn on the gas again. Do not re-enter the building, vehicle, trailer, or area.
- **Finally**, let the service man and firefighters check for escaped gas. Have them air out the area before you return. Properly trained LP-Gas service people should repair the leak, then check and relight the gas appliance for you.

NO ODOR DETECTED - ODOR FADE

Some people cannot smell well. Some people cannot smell the odor of the chemical stench put into the gas. You must find out if you can smell the odorant in propane. Smoking can decrease your ability to smell. Being around an odor for a time can affect your sensitivity or ability to detect that odor. Sometimes other odors in the area mask the gas odor. People may not smell the gas odor or their minds are on something else. Thinking about smelling a gas odor can make it easier to smell.

The odorant in LP-gas is colorless, and it can fade under some circumstances. For example, if there is an underground leak, the movement of the gas through soil can filter the odorant. Odorants in LP-Gas also are subject to oxidation. This fading

can occur if there is rust inside the storage tank or in iron gas pipes.

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity.

LP-Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

- **Learn to recognize the odor of LP-gas.** Your local LP-Gas Dealer can give you a "Scratch and Sniff" pamphlet. Use it to find out what the propane odor smells like. If you suspect that your LP-Gas has a weak or abnormal odor, call your LP-Gas Dealer.
- If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the LP-Gas system. If you are qualified, consciously think about the odor of LP-Gas prior to and while lighting pilot lights or performing service or making adjustments.
- Sometimes a basement or a closed-up house has a musty smell that can cover up the LP-Gas odor. Do not try to light pilot lights, perform service, or make adjustments in an area where the conditions are such that you may not detect the odor if there has been a leak of LP-Gas.
- Odor fade, due to oxidation by rust or adsorption on walls of new cylinders and tanks, is possible. Therefore, people should be particularly alert and careful when new tanks or cylinders are placed in service. Odor fade can occur in new tanks, or reinstalled old tanks, if they are filled and allowed to set too long before refilling. Cylinders and tanks which have been out of service for a time may develop internal rust which will cause odor fade. If such conditions are suspected to exist, a periodic sniff test of the gas is advisable. **If you have any question about the gas odor, call your LP-gas dealer. A periodic sniff test of the LP-gas is a good safety measure under any condition.**
- If, at any time, you do not smell the LP-Gas odorant and you think you should, assume you have a leak. Then take the same immediate action recommended above for the occasion when you do detect the odorized LP-Gas.
- If you experience a complete "gas out," (the container is under no vapor pressure), turn the tank valve off immediately. If the container valve is left on, the container may draw in some air through openings such as pilot light orifices. If this occurs, some new internal rusting could occur. If the valve is left open, then treat the container as a new tank. Always be sure your container is under vapor pressure by turning it off at the container before it goes completely empty or having it refilled before it is completely empty.

Installation in Residential Garages

Gas utilization equipment in residential garages shall be installed so that all burners and burner ignition devices are located not less than 18" (457mm) above the floor.

Such equipment shall be located, or protected, so it is not subject to physical damage by a moving vehicle.

Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (a) the installation or replacement of gas piping or (b) the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required and has complied with all the requirements of the authority having jurisdiction.

The installation must conform with local codes, or, in the absence of local codes, with the *National Fuel Gas Code*, ANSI Z223.1*/*Canadian Installation Code*, CAN/CGA B149.

*Available from the American National Standards Institute, Inc., 11 West 42nd St., New York, NY 10036.

Installer l'appareil selon les codes ou règlements locaux, ou, en l'absence de tels règlements, selon les Codes d'installation CAN/CGA-B149.

Introduction

This model is a direct vent gas appliance and is designed to operate with all combustion air being siphoned from the outside of the building and all exhaust gases expelled to the outside of the building.

Warning: This unit is not for use with solid fuel.

Pre-Installation Preparation

This direct vent gas fireplace and its components are tested and safe when installed in accordance with this Installation Manual. Report to your dealer any parts damaged in shipment, specifically check glass condition. Do not install unit with damaged, incomplete, or substitute parts. Read all instructions before starting installation and follow these instructions carefully during installation to insure maximum benefit and safety. Failure to follow them will void your warranty and may present a fire hazard.

The Empire Comfort System, Inc. warranty will be voided by, and Empire Comfort System, Inc. disclaims any responsibility for the following actions:

- Installation of any damaged fireplace or vent system component.
- Modification of the fireplace or direct vent system.
- Installation other than as instructed by Empire Comfort System, Inc.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not manufactured or approved by Empire Comfort System, Inc.

High Altitude Installation

When installing this unit at an elevation above 2000 feet (in the United States) it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Generally, input should be reduced 4 percent for each 1000 feet above sea level. However, if the heating value of the gas has been reduced, this general rule may not apply. Check with local gas utility for proper orifice size identification.

APPLIES TO CANADIAN MODELS ONLY

Altitude: 0-4,500 feet (0-1370 m) without orifice change.

For high altitude installations consult the local gas distributor or the authority having jurisdiction for proper rating methods. If the installer must convert the unit to adjust for varying altitudes, the information sticker (illustrated below) must be filled out by the installer and adhered to the appliance at the time of conversion.

THE CONVERSION SHALL BE CARRIED OUT BY A MANUFACTURER'S AUTHORIZED REPRESENTATIVE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFAC-

TURER, PROVINCIAL OR TERRITORIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B141.1 OR CAN/CGA-B141.2 INSTALLATION CODES.

LA CONVERSION DOIT ÊTRE EFFECTUÉE CONFORMÉMENT AUX RÉGLEMENTATION PROVINCIAUX EN CAUSE ET AUX EXIGENCES DES CODES D'INSTALLATION CAN/CGA-B149.

This appliance has been converted for use at an altitude of _____
Orifice size _____ Manifold Pressure _____
Input (Btu/h) _____ Fuel Type _____
Date of Conversion _____ Converted by _____

Cet appareil a été converti au _____
Injecteur _____ Pression à la tubulure d'alimentation _____
Débit calorifique _____

Gas Supply (Figure 1)

Check all local codes for requirements, especially for the size and type of gas supply line required.

Recommended Gas Pipe Diameter

Pipe Length (Feet)	Schedule 40 Pipe Inside Diameter		Tubing, Type L Outside Diameter	
	Nat.	L.P.	Nat.	L.P.
0-10	1/2" 1.3 cm	3/8" 1.0 cm	1/2" 1.3 cm	3/8" 1.0 cm
10-40	1/2" 1.3 cm	1/2" 1.3 cm	5/8" 1.6 cm	1/2" 1.3 cm
40-100	1/2" 1.3 cm	1/2" 1.3 cm	3/4" 1.9 cm	1/2" 1.3 cm
100-150	3/4" 1.9 cm	1/2" 1.3 cm	7/8" 2.2 cm	3/4" 1.9 cm

Note: Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized.

Note: Since some municipalities have additional local codes, it is always best to consult your local authority and installation code.

The use of the following gas connectors is recommended:

- ANS Z21.24 Appliance Connectors of Corrugated Metal Tubing and Fittings
- ANS Z21.45 Assembled Flexible Appliance Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction.

Consult the current National Fuel Gas Code, ANSI Z223.1 CAN/CGA-B149 (.1 or .2) installation code.

Installing a New Main Gas Cock

Each appliance should have its own manual gas cock.

A manual main gas cock should be located in the vicinity of the unit. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation.

Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. This should be done with a soap solution watching for bubbles on all exposed connections, and if unexposed, a pressure test should be made.

Never use an exposed flame to check for leaks. Appliance must be disconnected from piping at inlet of control valve and pipe capped or plugged for pressure test. Never pressure test with appliance connected; control valve will sustain damage!

A gas valve and ground joint union should be installed in the gas line upstream of the gas control to aid in servicing. It is required by the National Fuel Gas Code that a drip line be installed near the gas inlet. This should consist of a vertical length of pipe tee connected into the gas line that is capped on the bottom in which condensation and foreign particles may collect.

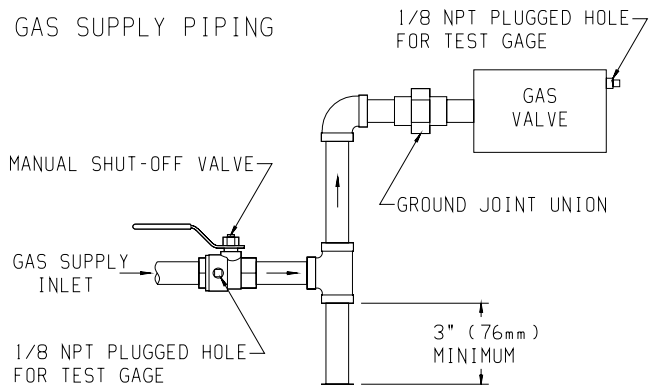


Figure 1

Method of Installing a Tee Fitting Sediment Trap

Pressure Testing of the Gas Supply System

1. To check the inlet pressure to the gas valve, a 1/8" (3mm) N.P.T. plugged tapping, accessible for test gauge connection, must be placed immediately upstream of the gas supply connection to the appliance.
2. The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).
3. The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

Attention! If one of the procedures results in pressures in excess of 1/2 psig (14" w.c.) (3.5 kPa) on the appliance gas valve, it will result in a hazardous condition.

Checking Manifold Pressure

Both Propane and Natural gas valves have a built-in pressure regulator in the gas valve. Natural gas models will have a manifold pressure of approximately 3.5" w.c. (.871kPa) for maximum input or 1.7" w.c. (.423kPa) for minimum input at the valve outlet with the inlet pressure to the valve from a minimum of 5.0" w.c. (1.245kPa) for the purpose of input adjustment to a maximum of 10.5" (2.615kPa) w.c. Propane gas models will have a manifold pressure approximately 10.0" w.c. (2.49kPa) for maximum input or 5.9" w.c. (1.469kPa) for minimum input at the valve outlet with the inlet pressure to the valve from a minimum of 11.0" w.c. (2.739kPa) for the purpose of input adjustment to a maximum of 13.0" w.c. (3.237kPa).

A 1/8" (3mm) N.P.T. plugged tapping, accessible for test gauge connection, is located on the outlet side of the gas control.

Installation on Rugs and Tile

If this appliance is to be installed directly on carpeting, tile, or other combustible material, *other than wood flooring*, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

The base referred to above does not mean the fire-proof base as used on wood stoves. The protection is primarily for rugs that may be extremely thick and light-color tile that can discolor.

Clearances (Figures 2, 3, 4 and 5)

In selecting a location for installation, it is necessary to provide adequate accessibility clearances for servicing and proper operation.

Locating and Venting the Direct Vent Fireplace

Clearances: When facing the front of the direct vent fireplace the minimum clearances to combustible construction (material) are the following:

Top of appliance (ceiling)	36 (inches)
Rear Wall	2 (inches)
Side Wall	6 (inches)
Heater Corners (45° angle) to Wall	4 (inches)
Floor	0 (inches)

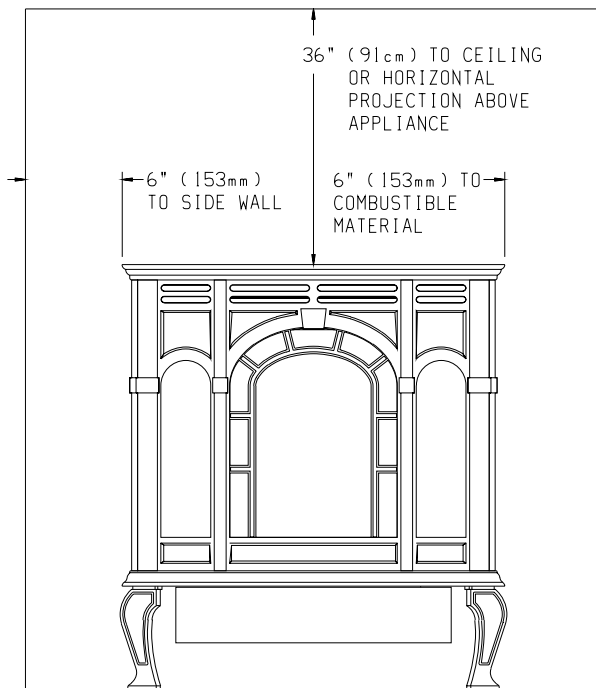
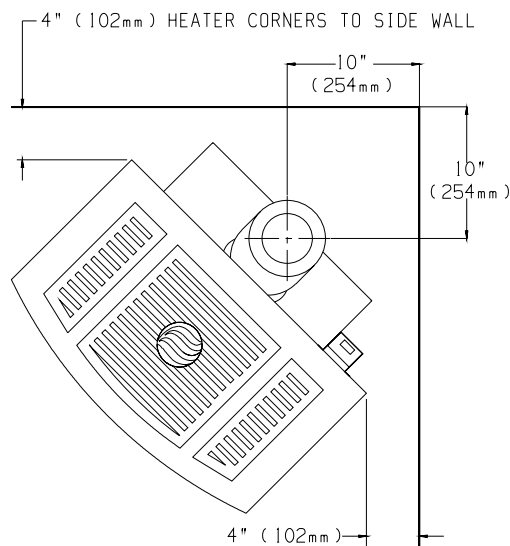
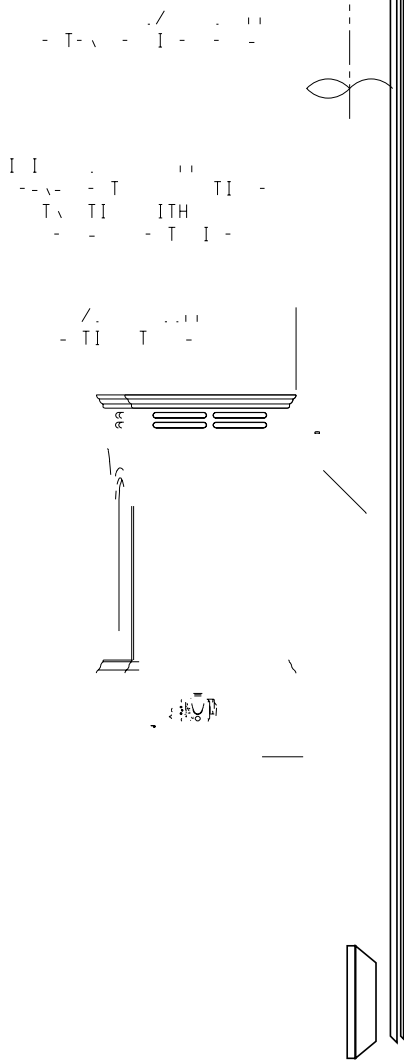


Figure 2



NOTE: HEATER INSTALLED AT 45° ANGLE IN CORNER

Figure 3



Appliance Hardware Package (Figure 6)


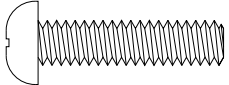

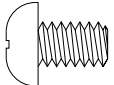

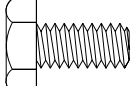

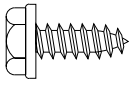
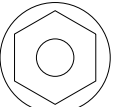

HARDWARE - FULL SIZE	
	
1/4-20 X 1" PHILLIPS HEAD BOLT (ZINC)	
	
1/4-20 X 3/8" PHILLIPS HEAD BOLT (ZINC)	
	
1/4-20 X 1/2" LEVELING BOLT (BLACK)	
	
NO. 10 X 1/2" HEX WASHER HEAD SCREW (BLACK)	
	
1/4-20 WASHER HEAD NUT (ZINC)	

Figure 6

Appliance Hardware Package Parts List

Part Description	Part Number	Quantity Supplied
1/4-20 x 1" Phillips Head Bolt	R-3188	4
1/4-20 x 3/8" Phillips Head Bolt	R-3646	16
1/4-20 x 1/2" Leveling Bolt	R-3747	4
No. 10 x 1/2" Hex Washer Head Screw	R-2737	8
1/4-20 Washer Head Nut	R-3185	4
Leg Pad "A" (see Figure 7)	CI-008	2
Leg Pad "B" (see Figure 7)	CI-009	2
1-1/4" x 1/2" Retaining Tab (see Figure 10)	CI-007	4
1/4 x 9/32 Washer (Not Shown)	R-1150	8

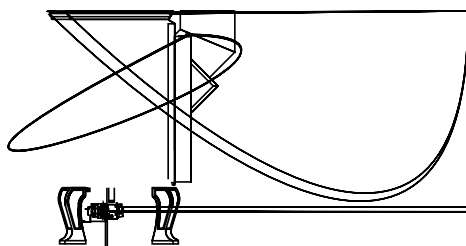


Figure 5

Assembly of Cast Iron (Outer Casing) Stove Casting (Figures 7, 8, 9, 10, 11 and 12)

Attention: Included in the hardware package are (8) 1/4" inside diameter washers. A 1/4" washer may be used with a 1/4-20 x 3/8" bolt when assembling the stove casting parts. If a bolt hole is not tapped deep enough for a tight fit between stove casting parts, the 1/4" washer can be used as a shim to provide a tight fit.

The 1/4" washers are not required for assembly of the stove casting if all the bolt holes are tapped to a proper depth.

Additional 1/4" washers are to be purchased locally.

1. Place porcelain casting pieces on a non-abrasive surface in order

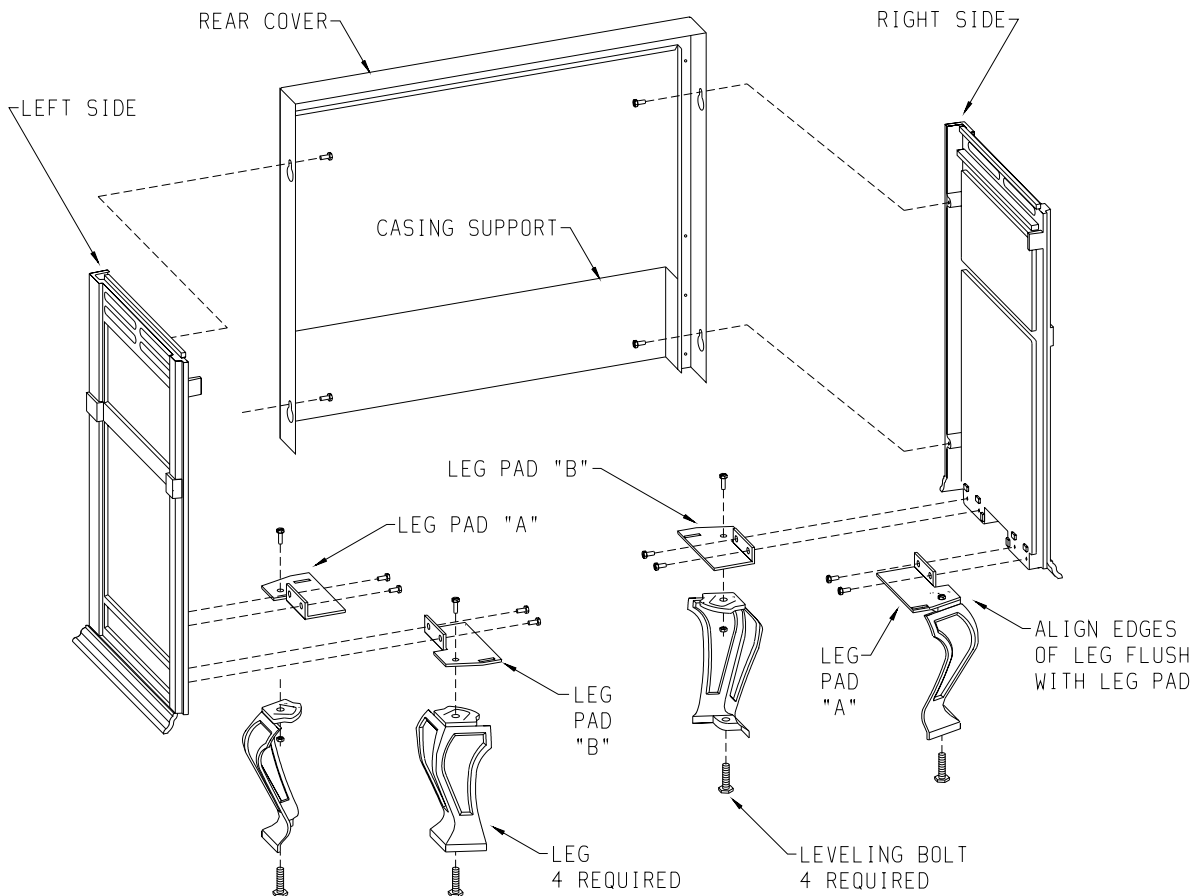


Figure 7

- to protect the porcelain finish. The exterior of the porcelain casting pieces should be facing the non-abrasive surface.
2. The assembly of the casting is accomplished in 6 stages:
 - A. Attaching legs to the sides (Figure 7).
 - B. Attaching rear cover to sides (Figure 8).
 - C. Removing protective packaging from casing front and window (Figure 9).
 - D. Assembly of front by attaching retaining tabs and placing front on unit (Figure 10).
 - E. Inserting firebox into partially completed assembly (Figure 11 and Figure 12).
 - F. Placing top on unit.

Detailed Instructions Follow

3. Refer to Figure 7, the leg pads will have the letter "A" and "B" stamped into the metal. Place leg pad "A" and leg pad "B" at the bottom of each casing side. Leg pad "A" attaches to the front of the casing side, right and to the rear of the casing side, left. Leg pad "B" attaches to the rear of the casing side, right and to the front of the casing side, left. Position the 3/4" flange on the leg pad against the (2) locator dimples on the casing side. The 3/4" flange must be facing upward, toward the top louver openings on the casing side. Attach the two **rear** leg pads to the casing sides with (2) 3/8" bolts. Attach but do not completely tighten the two **front** leg pads to the casing sides with (2) 3/8" bolts. **Attention:** The front leg pads can be adjusted to provide a snug fit between the casing front and the casing sides.
4. Attach (4) leveling bolts to the bottom of the (4) legs.
5. Align the 3/8" hole at the top of the leg with the 3/8" hole in the leg pad. **Attention:** For proper positioning of the leg to the leg pad the (2) 1-1/2" top edges of the leg must be placed flush and parallel to the (2) edges on the leg pad. Attach leg to leg pad by inserting (1) 1" bolt through the leg pad and into the leg, secure bolt with 1/4" nut.
6. Insert (2) 3/8" bolts into the (2) holes on the edges of the casing sides. The bolts should only be threaded half-way into the holes in order to allow for clearance when the casing back is attached to the casing sides.

7. Refer to Figure 8, attach casing support to rear cover with (4) 10 x 1/2" screws. The rear cover has (4) keyholes for attachment to the casing sides. Stand the casing sides on the floor with the (2) bolts attached half-way into the edges of the rear cover positioned at the rear. The large diameter holes in the keyholes of the rear cover will be toward the floor. Working with one casing side at a time, place the large diameter holes in the keyholes over and behind both of the bolts at the same time. Push downward on the rear cover to lock the keyholes into position behind the bolts. Finish tightening both bolts to secure rear cover to casing side. Repeat this procedure to secure rear cover to the second casing side.

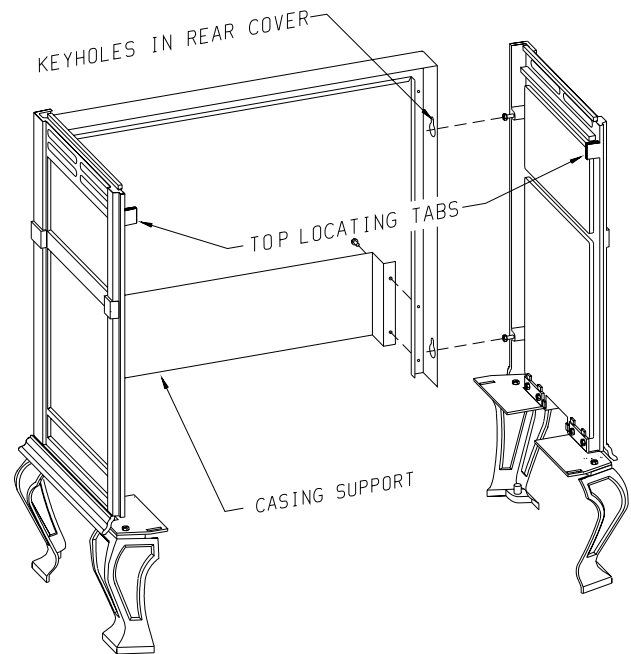
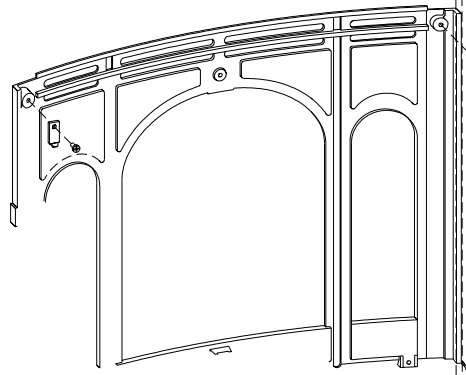
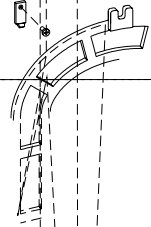


Figure 8



CASING FRONT (REAR VIEW)



1/4" WASHER

1/4-20 X 3/4"
PHILLIPS HEAD SCREW

8. Position the completed portion of the casing in the approximate location for installation as the completed assembly will be heavy.
9. Refer to Figure 9, removing protective packing foam from casing front and window. Remove the (1) 3/4" bolt and (1) 1/4" washer from top of window. Remove (1) 3/8" bolt and 1 - 5/8" x 3/4" retaining tab from bottom of window. Remove the window from casing front. Remove the protective sheet of foam from the casing front.
Place the window into the casing front. Attach the top of the window to the casing front with (1) 1/4" washer and (1) 3/4" bolt. Place the 1 - 5/8" x 3/4" retaining tab into the locator notch on the bottom of the casing front. Attach the bottom of the window to the casing front by inserting (1) 3/8" bolt through retaining tab and into locator notch.
10. Attach the (4) 1-1/4" x 1/2" retaining tabs to the casing front with (4) 3/8" bolts. The retaining tabs should be positioned downward.
11. Refer to Figure 10, attach casing front to outer casing by using the (4) retaining tabs on the casing front. The (2) top, retaining tabs on the casing front will be placed behind the (2) top, locator tabs on the front of the casing sides. The (2) bottom, retaining tabs will be inserted into the (2) 9/16" slots on the front, leg pads. Place the top, retaining tabs behind the top, locator tabs as you pivot inward the bottom of the casing front in order to insert the bottom, retaining tabs into the slots.

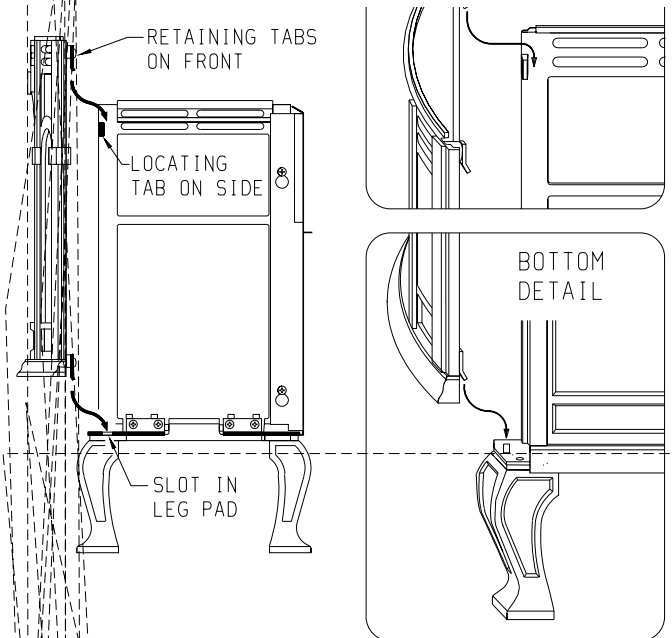


Figure 10

12. The following procedure will provide a snug fit between the casing front and the casing sides. Grasp the right, front leg, push inward on the leg in order to provide a snug fit between the casing front and the casing side. Continue to hold the right, front leg as you completely tighten the (2) 3/8" bolts that attach the leg pad to the right, casing side. Repeat procedure for left, front leg to achieve a snug fit between the casing front and the casing side.
13. Remove the casing front from the outer casing.
14. Refer to Figures 11 and 12, the appliance firebox can now be inserted into the outer casing. Center the firebox in the outer casing. **Attention:** Remove (1) Phillips-head screw in the top of the valve cover. The screw is used to secure the valve cover in place during shipping. The (1) Phillips-head screw can be discarded.

Delayed Ignition Reset Switch Assembly (Figure 14)

Attach black wire from REMOTE/OFF/ON switch to the front 1/4" male tab on the reset switch. Attachment of black wire onto the reset switch is done in conjunction with the preceding steps for **Installation of Wire Channel Assembly**. Black wire on the back of the reset switch is attached to the TH/TP terminal on gas valve (this connection is factory installed). The reset switch can be activated if the main burner has a delayed ignition. The right, relief door is connected by a metal wire to a cotter pin that is inserted into the reset switch. When a delayed ignition occurs the right, relief door pivots upward, the metal wire pulls the cotter pin out of the reset switch and the main burner is shut OFF.

Whenever the delayed ignition reset switch is activated you must contact a qualified service person to determine the cause for the delayed ignition reset switch to be activated.

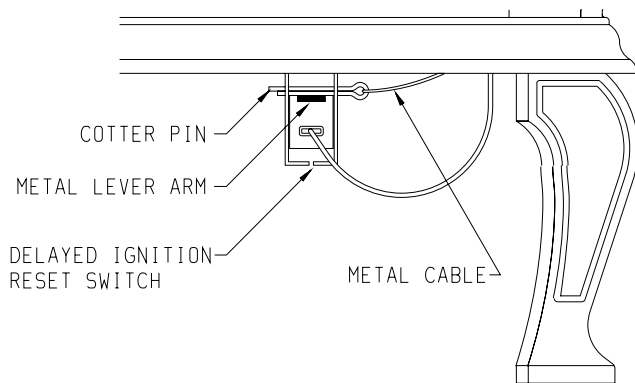


Figure 14

Replacement of cotter pin into delayed ignition reset switch assembly by a qualified service person.

1. Lower valve cover.
2. The reset switch is located behind the right side of the valve cover.
3. Verify the metal cable with attached cotter pin has free movement.
4. Depress the metal lever arm located on the front of the reset switch.
5. With the metal lever arm depressed, insert cotter pin into the clearance hole on the right side of the bracket and into the clearance hole on the left side of the bracket.

Attention: The tip of the cotter pin must remain flat. The tip of the cotter pin must never be bent-over. If the tip of the cotter pin is bent-over it could prevent the delayed ignition reset switch from functioning during a delayed ignition.

6. Replacement of cotter pin into delayed ignition reset switch assembly is completed.

Reassembly and Resealing Gas Accumulation Relief System (Relief Doors) and Combustion Chamber

Whenever the relief doors are pivoted open by a delayed ignition in the main burner, the relief door gaskets and combustion chamber must be examined by a qualified service person for damage. All damaged gaskets on the relief doors and combustion chamber must be replaced by a qualified service person. If damage occurs to the combustion chamber, it must be replaced by a qualified service person. Contact Empire Comfort Systems, Inc. for replacement parts.

Sidewall Venting Installation

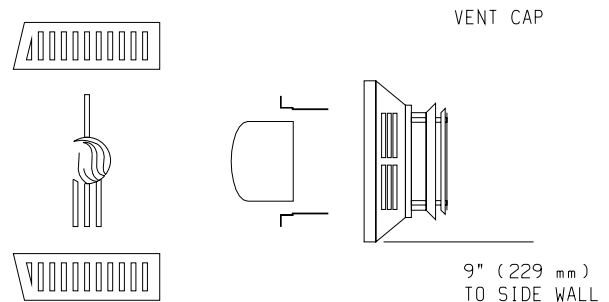
The maximum vertical and horizontal distances for one (1) 90° elbow are 25 feet and 12 feet, respectively. Vertical dimensions are based on top of fireplace to centerline of pipe. Horizontal dimensions are based on centerline of pipe to termination.

CAUTION: Total vertical run **MUST BE** completed before starting horizontal run. **Horizontal chimney run must slope upward (away from fireplace) 1/4" per foot and vent termination must be level.**

Under no circumstances should combustible materials (including siding) be closer than 2" from the top of the 6 5/8" pipe or closer than 1" on the side and bottom.

Cutting the Hole (Figure 15)

After the appliance has been positioned in its permanent location, the hole through the exterior wall of the house can be cut. This hole needs to be 10" high x 10" wide square with its center line determined by the amount of vertical arise and horizontal run of the termination. When locating the hole it must be noted that the bottom of the cap must be 12" above the ground level, and top of the cap must be no less than 18" below a combustible projection, and no closer than 9" to any wall running parallel to vent termination.



Venting Graph (Dimensions in Feet) (Figure 16)

1. Determine the height of the center of the termination. Using this dimension on the Venting Graph, locate the point it intersects with the slanted graph line, or the right edge of the graph.
2. From the point of this intersection, draw a vertical line to the bottom of the graph.
3. Adjust the indicated maximum dimension for additional elbows if necessary.
4. Position the unit so that maximum horizontal run is not exceeded.

Venting Must Be Within Shaded Area

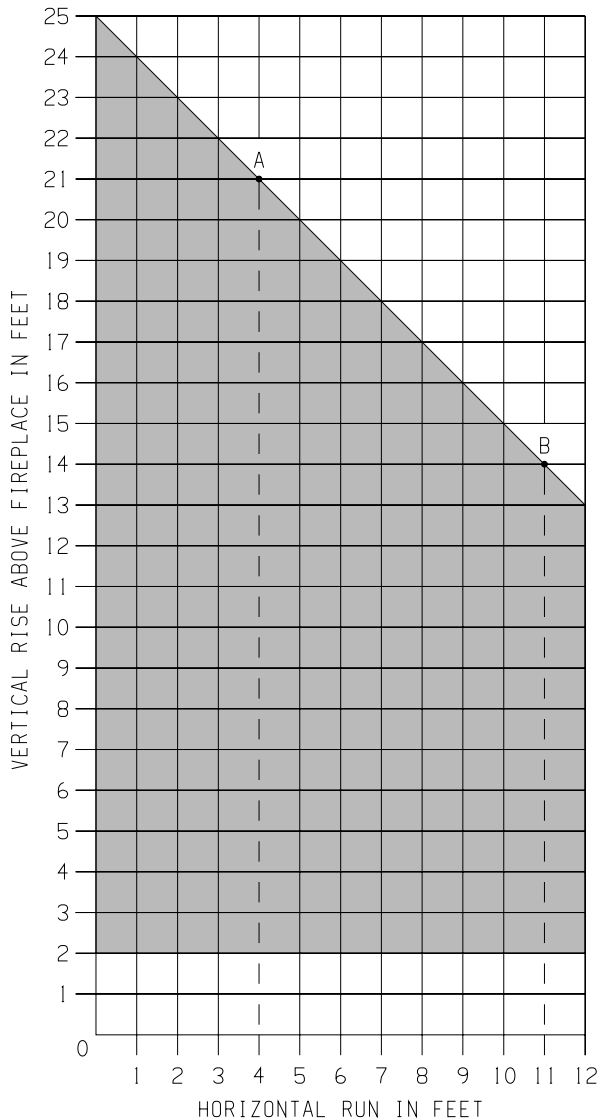


Figure 16

Venting Requirements (Figure 17)

Minimum vertical rise from appliance outlet = 24 inches (610mm)

Attention: All vent runs must have a minimum **VERTICAL** rise of two feet. If the vent run is directly behind the appliance, you must attach Simpson Dura-Vent 36" snorkel, part number SD-981 on the exterior of the building.

Maximum vertical rise from appliance outlet = 25 feet (7.62m), the restrictor plate may be used above 10 feet.

Maximum horizontal run from appliance outlet = 12 feet (3.66m)

Maximum vertical rise and horizontal run is a combined total of 25 feet (7.62m)

Maximum elbows = (2) 90°, for the second elbow subtract 5 feet from a horizontal run.

To Use the Vent Graph

EXAMPLE A:

If the vertical rise from the appliance outlet is 21 feet, the horizontal run to the outer wall flange of the vent termination must not exceed 4 feet with (1) 90° elbow.

EXAMPLE B:

If the vertical rise from the appliance outlet is 14 feet, the horizontal run to the outer wall flange of the vent termination must not exceed 11 feet with (1) 90° elbow.

SPECIAL NOTE: For each 45 degree elbow installed in the horizontal run, the length of the horizontal run **MUST** be reduced by 18 inches (45cm). This does not apply if the 45 degree elbows are installed on the vertical rise of the vent system.

Example: According to the chart the maximum horizontal run is 12 feet and if two 45 degree elbows are required in the horizontal run it must be reduced to 9 feet.

The maximum number of 45 degree elbows permitted per side wall installation is two. These elbows can be installed in either the vertical rise or horizontal run.

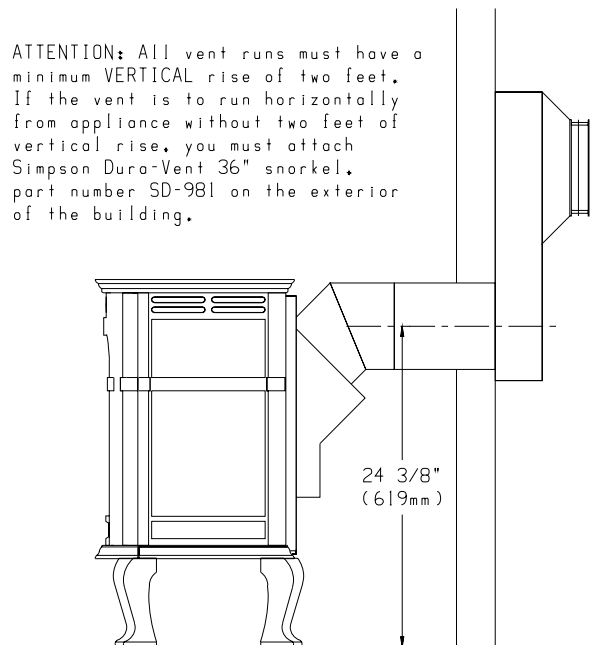


Figure 17

Termination Clearances (Figure 19)

Termination clearance for buildings with combustible and noncombustible exteriors.

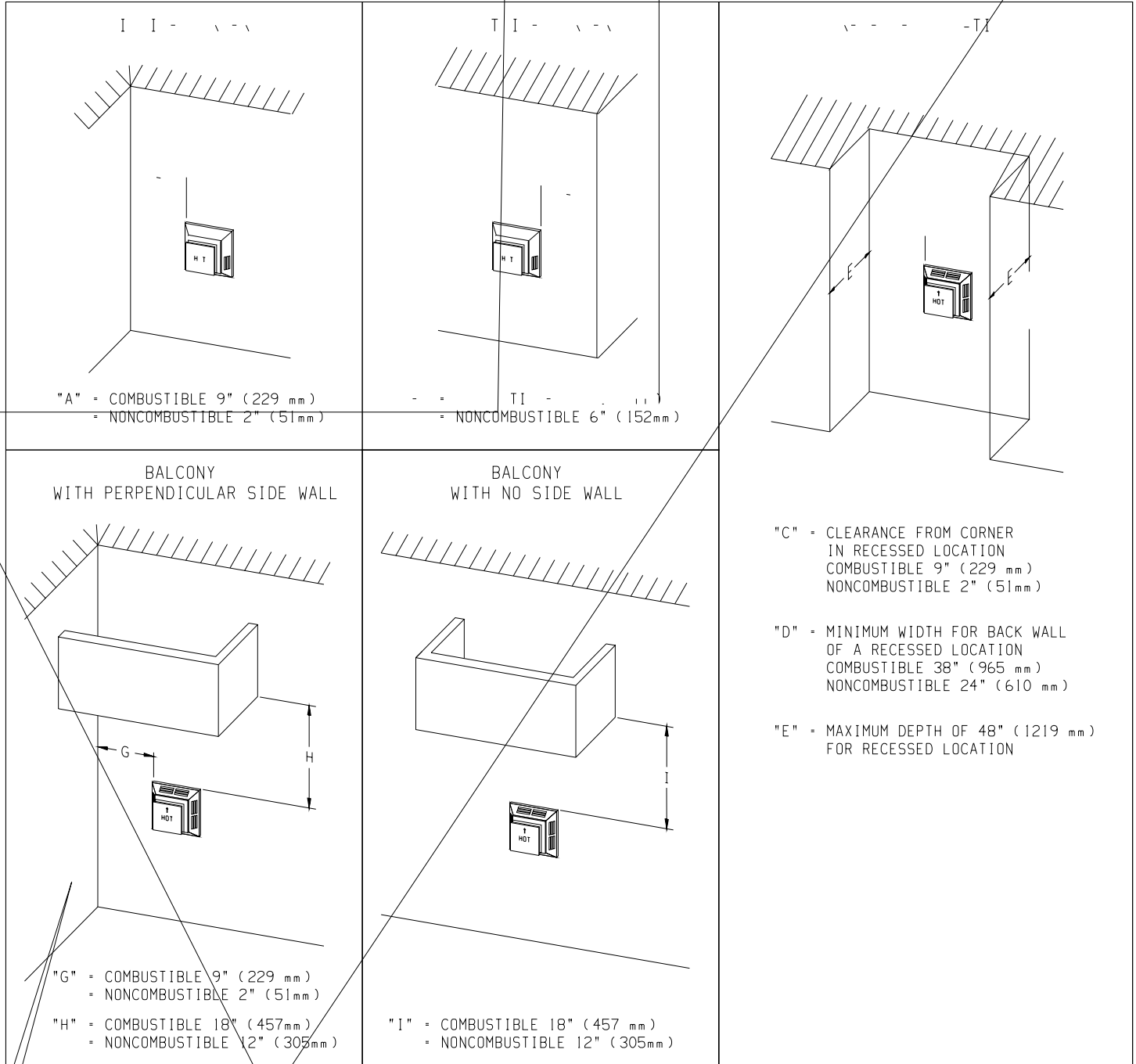


Figure 19

Vertical Sidewall Installations

Important! Minimum clearance between vent pipes and combustible materials is one inch (1") (25mm) on, bottom and sides and (2") (51mm) on top.

Important! When vent termination exits through foundation less than 20" below siding outcrop, the vent pipe must flush up with the siding. SD985 termination cap must also be used.

Information on Various Venting Routes and Components

Important: It is always best to locate the appliance in such a way that minimizes the number of offsets and horizontal vent length.

Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.

The graph showing the relationship between vertical and horizontal side wall venting will help to determine the various vent lengths allowable.

The horizontal vent run refers to the total length of vent pipe from the vent elbow of the appliance to the face of the outer wall.

Vent Clearances (Figure 20)

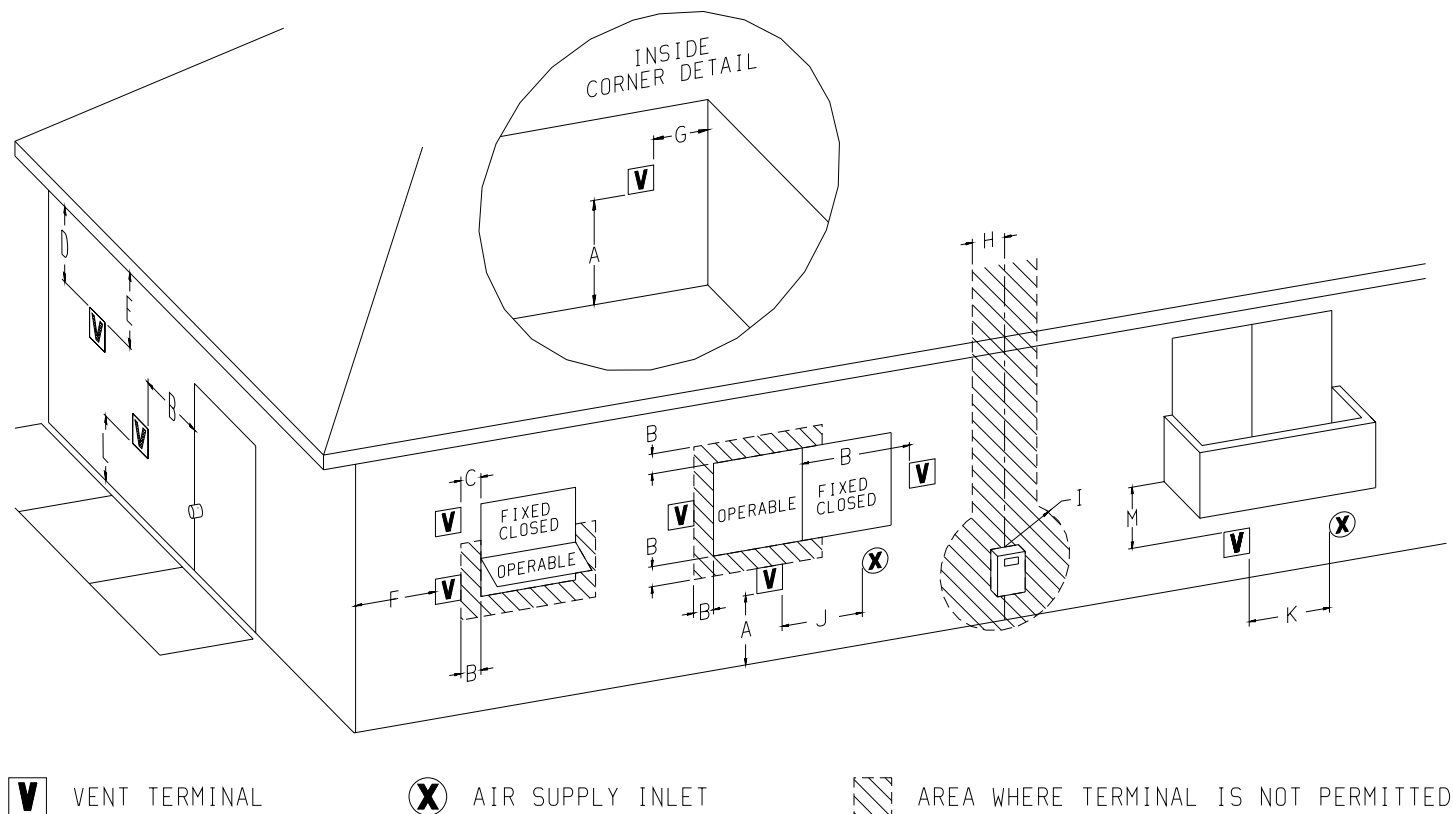


Figure 20

A = *Clearance above grade, veranda, porch, deck or balcony [*12 inches (30cm) minimum]

B = clearance to window or door that may be opened [*9 inches (23cm) minimum for appliances < 50,000 Btuh (14.6kW)]

C = clearance to permanently closed window [minimum 12 inches (30cm) recommended to prevent condensation on window]

D = vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 24 inches (61cm) from the top of the terminal

E = clearance to unventilated soffit [24 inches 61cm) minimum]

F = clearance to outside corner [12 inches (30cm) minimum]

G = clearance to inside corner [9 inches (22.5cm) minimum]

H = *not to be installed above a meter/regulator assembly within 3 feet (90cm) horizontally from the center-line of the regulator

I = clearance to service regulator vent outlet [*6 feet (1.8m) minimum]

J = clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance [*12 inches (30cm) minimum for appliances ≤ 100,000 Btuh (30 kW)

36 inches (90cm) minimum for appliances > 100,000 Btuh (30kW)]

K = clearance to a mechanical air supply inlet [* 6 feet (1.8m) minimum]

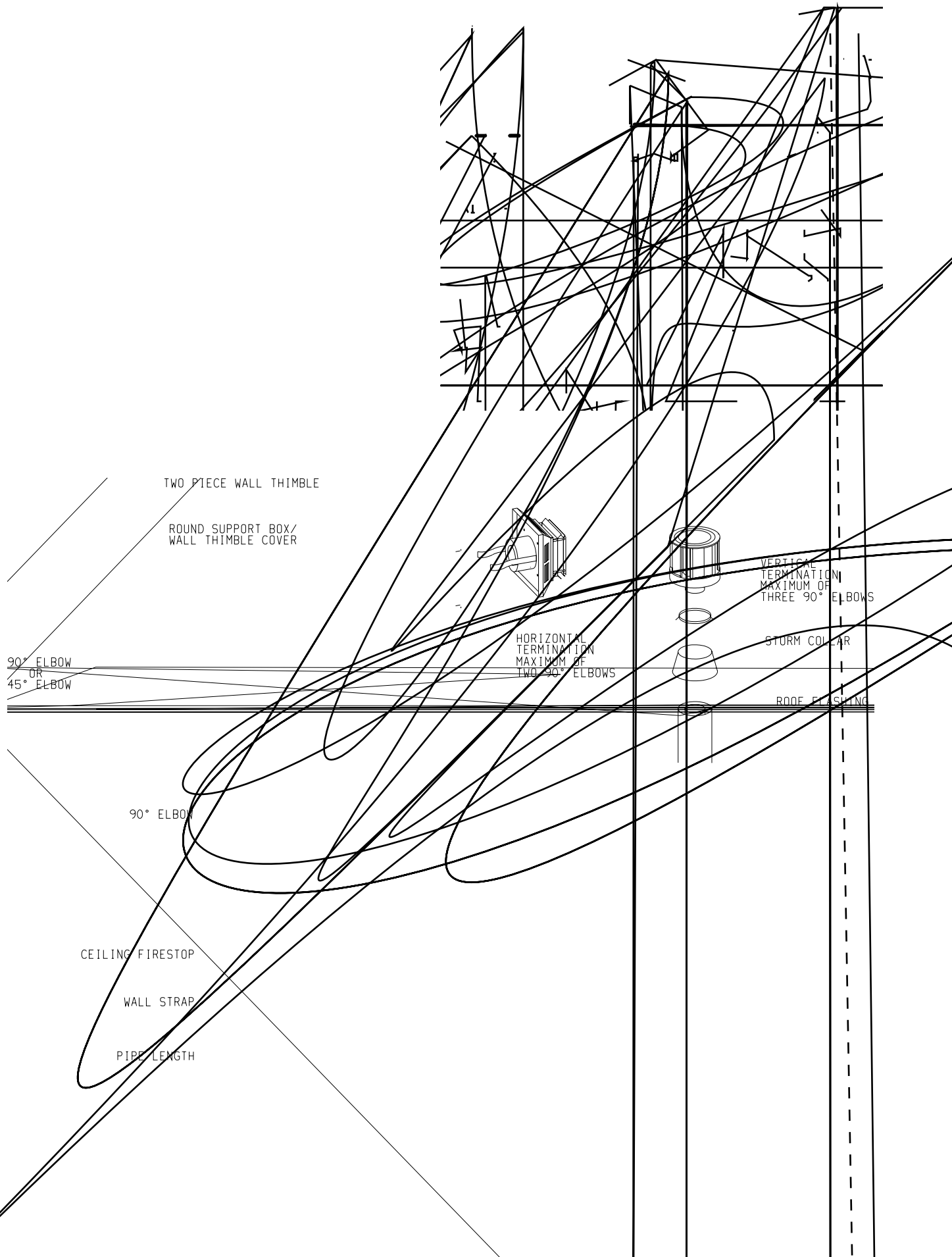
L = †clearance above paved sidewalk or a paved driveway located on public property [*7 feet (2.1m) minimum]

M = clearance under veranda, porch, deck, or balcony [*12 inches (30cm) minimum‡]

† a vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings*

‡ only permitted if veranda, porch, deck, or balcony, is fully open on a minimum of 2 sides beneath the floor*

* as specified in CGA B149 Installations Codes or ANSI Z223.1. Note: Local Codes or Regulations may require different clearances.



TWO PIECE WALL THIMBLE

ROUND SUPPORT BOX/
WALL THIMBLE COVER

90° ELBOW
OR
45° ELBOW

HORIZONTAL
TERMINATION
MAXIMUM OF
TWO 90° ELBOWS

VERTICAL
TERMINATION
MAXIMUM OF
THREE 90° ELBOWS

STORM COLLAR

ROOF FLASHING

90° ELBOW

CEILING FIRESTOP

WALL STRAP

PIPE LENGTH

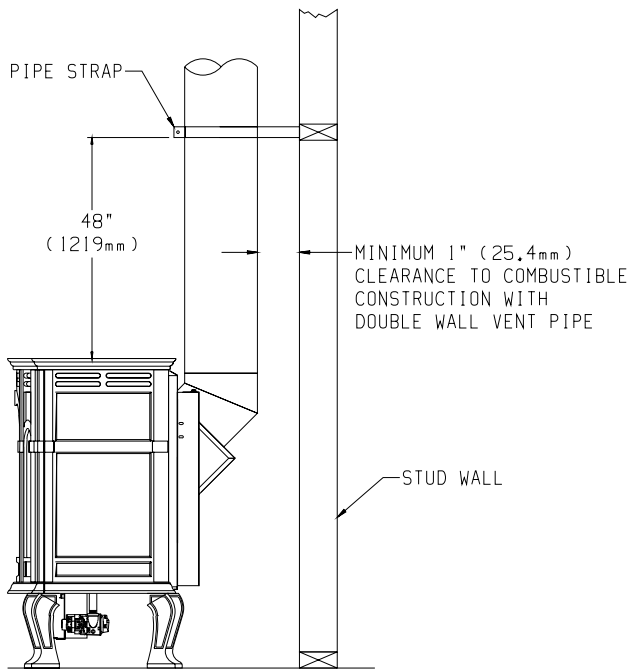


Figure 23

Installing Firestops (Figures 24, 25, 26 and 27)

Firestops are required for safety whenever the vent system passes through an interior wall, an exterior wall, or a ceiling. These firestops act as a firebreak heat shield and as a means to insure that minimum clearances are maintained to the vent system.

Horizontal runs in the vent system which pass through either interior or exterior walls, require the use of wall firestops on both sides of the wall through which the vent passes.

Position the firestops on both sides of the 10 inch x 10 inch hole, previously cut. Secure with nails or screws. Continue the vent run through the firestops. (See Figure 24)

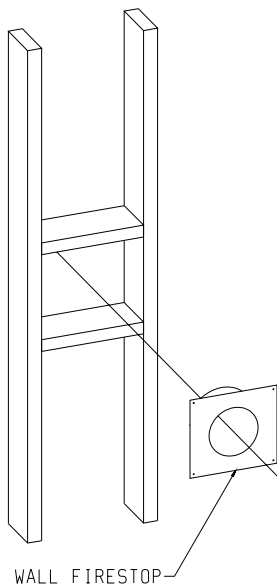


Figure 24

Vertical runs of this system which pass through ceilings require the use of ONE (1) ceiling firestop at the hole in each ceiling through which the vent passes.

Position a plumb bob directly over the center of the vertical vent component and mark the ceiling to establish the center point of the vent. Drill a hole or drive a nail through this center point and check the floor above for any obstructions such as wiring or plumbing runs. Reposition the appliance and vent system, if necessary, to accommodate ceiling joists and/or obstructions.

Cut a 10 inch x 10 inch hole through the ceiling, using the center point previously marked. Frame the hole with framing lumber the same size as the ceiling joists. (See Figure 25) If the area above the ceiling is NOT an attic, position and secure the ceiling firestop (SD-963) on the ceiling side of the previously cut and framed hole. (See Figure 26) If the area above the ceiling IS an attic, position and secure the firestop on top of the previously framed hole. (See Figure 27)

NOTE: Remove insulation from the framed area in the attic before installing the firestop and/or vent stop and/or vent pipes.

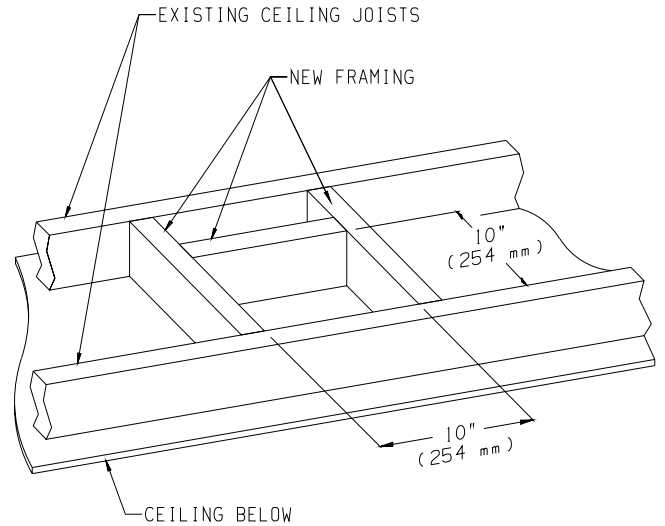


Figure 25

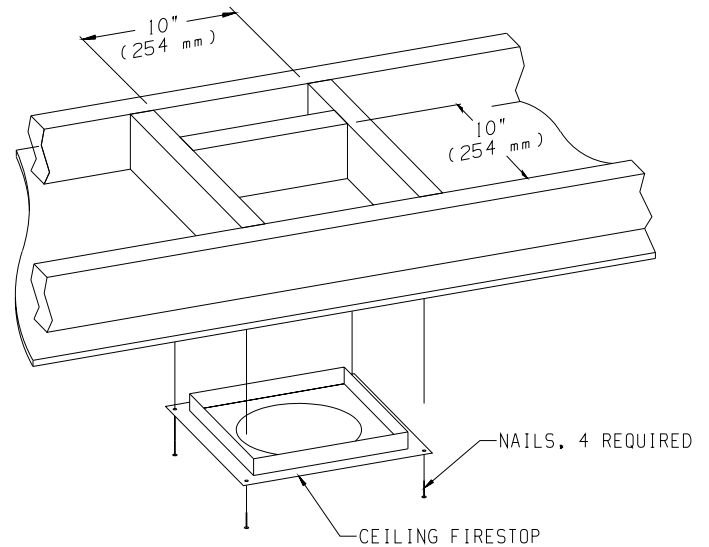


Figure 26

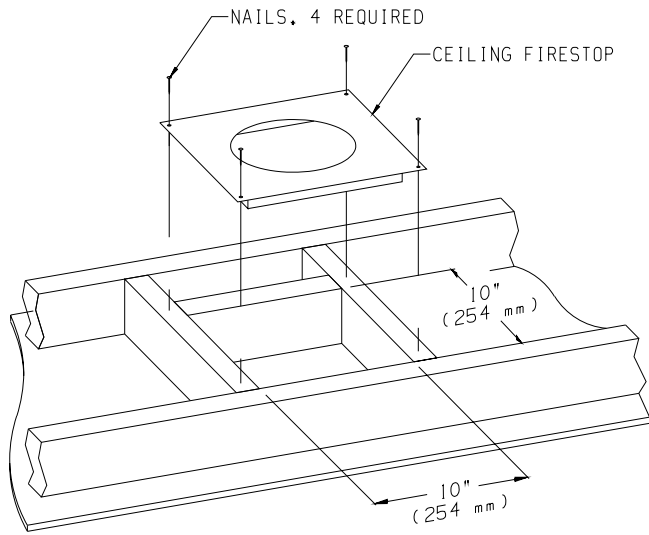


Figure 27

Horizontal Terminations (Figure 28)

Attach and secure the termination to the last section of horizontal venting by rotating and interlocking the ends as previously described.

NOTE: Termination cap should pass through the wall firestop from the exterior of the building. Adjust the termination cap to its final exterior position on the building.

WARNING: Termination cap must be positioned so that the arrow is pointing up.

Using the termination cap in the center of the square hole, attach the termination cap with the four wood screws provided. Before attachment of the termination, run a bead of silicone sealant rated above 250°F on its outside edge too, so as to make a seal to that exterior wall.

NOTE: Wood screws can and should be replaced with appropriate fasteners for use on stucco, brick, concrete or other types of siding.

CAUTION: If exterior walls are finished with vinyl siding, it is necessary to install the vinyl siding shield (SD-950).

Vinyl siding shield (SD-950) will be installed between the vent termination and the exterior wall. (See Figure 28) This horizontal vent termination bolts onto the flat portion of the vinyl siding standoff, so an air space will exist between the wall and the termination cap.

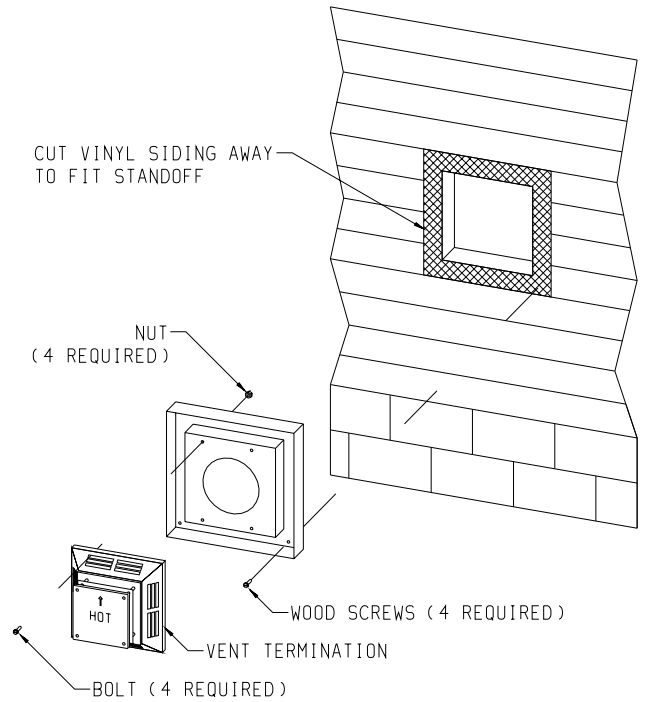


Figure 28

Vertical Terminations (Figures 29, 30 and 31)

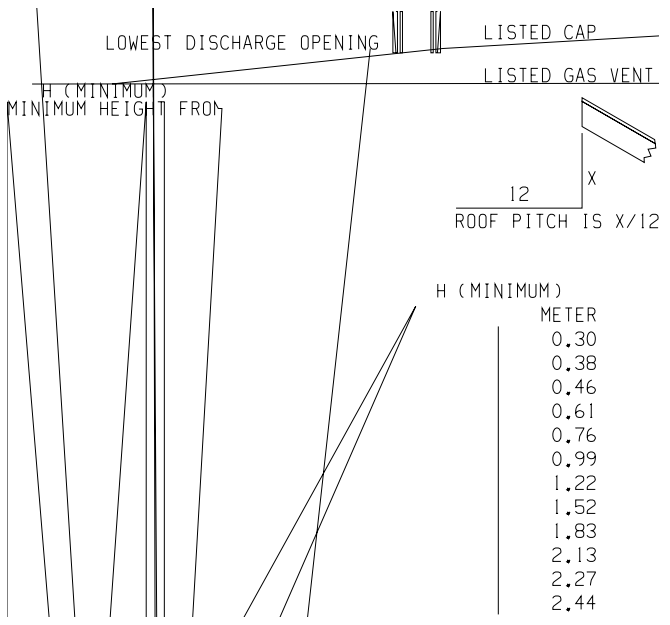
Locate and mark the center point of the venting pipe. Using a nail on the underside of the roof and drive this nail through this center point. Make the outline of the roof hole around this center point.

NOTE: Size of the roof hole dimensions depend on the pitch of the roof. There must be a 1 inch clearance (25mm) to the vertical pipe sections. This clearance is to all combustible material.

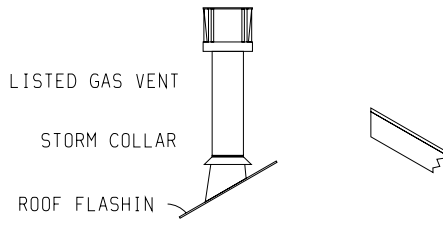
Cover the opening of the vent pipe and cut and frame the roof hole. Use framing lumber the same size as the roof rafters and install the frame securely. Flashing anchored to frame must withstand high winds. The storm collar is placed over this joint to make a water-tight seal. Non-hardening sealant should be used to completely seal this flashing installation.

Determining Minimum Vent Height Above the Roof.

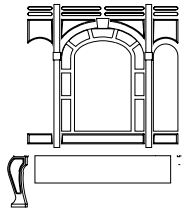
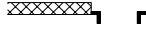
WARNING: Major U.S. building codes specify minimum chimney and/or vent height above the roof top. These minimum heights are necessary in the interest of safety. These specifications are summarized in Figure 29.



Vertical runs of this vent systems must be supported every 4 feet above the appliance flue outlet by wall brackets attached to the 6- 5/8 inch vent pipe and secured with nails or screws to structural framing members.

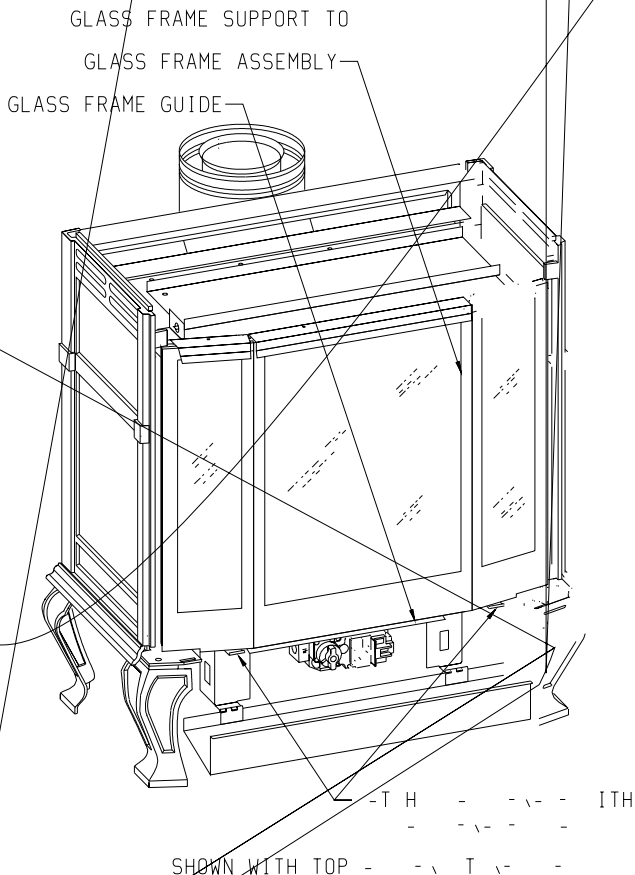


25'
(7.62 M)
MAXIMUM



Replacement of Gasket on Glass Panes (Figure33)

1. Remove casing top from outer casing.
2. Remove casing front from outer casing.
3. Lower valve cover on firebox.
4. Release two door latches at bottom of firebox.
5. Grasp bottom of glass frame, pull forward until bottom of glass frame is removed from glass frame guide and pull downward until glass frame is removed from glass frame support top.
6. Place glass frame assembly on a non-abrasive surface. The exterior of the glass frame assembly should be facing the non-abrasive surface.
7. Remove the (6) screws on the glass frame assembly.
8. Remove the (2) 1" x 13-3/4" divider brackets from the glass frame assembly.
9. Remove the gasket that is to be replaced on the glass pane. Clean the glass pane before the new gasket is attached.
10. Remove the backing material from the gasket.
11. Starting in a corner of the glass pane, place the gasket over the edge of the glass pane. The gasket should be equally divided between the front and back of the glass. Continue to attach the gasket until the four edges of the glass pane are gasketed.
12. When the glass panes are replaced into the glass frame assembly, the corner of the glass pane where the gasket was started and ended should be placed to the bottom of the glass frame assembly.
13. Replace and attach the (2) 1" x 13-3/4" divider brackets onto the glass frame assembly with the (6) screws from Step 7.
14. Grasp bottom of glass frame, push upward and insert glass frame into glass frame support top, push inward and insert glass frame into glass frame guide.
15. Attach two door latches to bottom of firebox.
16. Replace casing front onto outer casing.
17. Replace casing top onto outer casing.
18. Replacement of gasket on glass panes is completed.

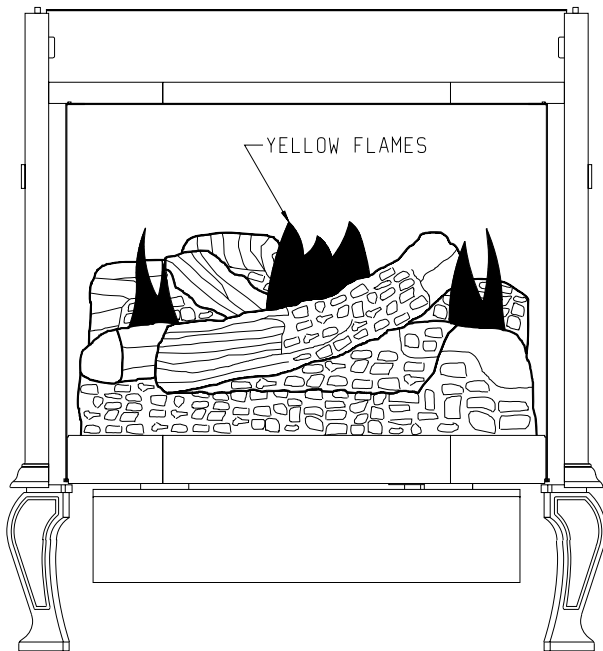


Main Burner Flame Pattern (Figure 36 and Figure 37)

Figure 36 shows a correct main burner flame pattern. Figure 37 shows an incorrect main burner flame pattern.

Air Shutter Adjustment

An air shutter adjusting screw is located on the exterior, bottom of the inner body. Screw air shutter adjusting screw **IN** to close air shutter top (increase yellow flame). Screw air shutter adjusting screw **OUT** to open air shutter top (decrease yellow flame).



Correct Main Burner Flame

Figure 36

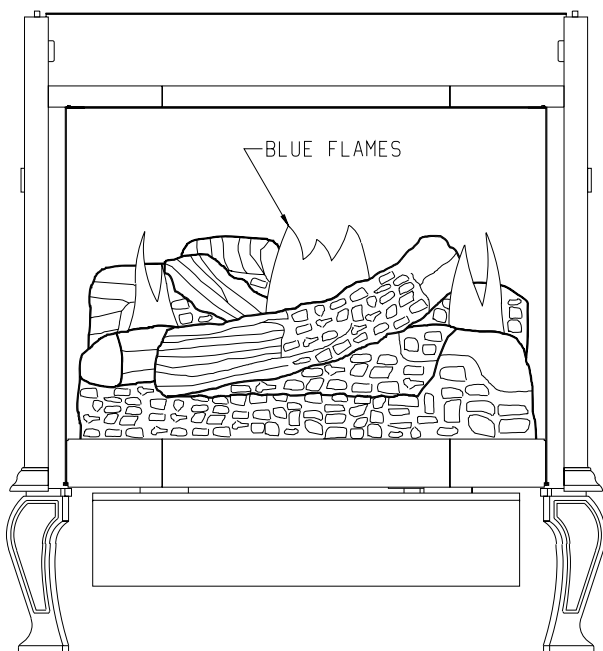
If main burner flame pattern is incorrect, as shown in Figure 37

- See Troubleshooting, page 25.

Cleaning and Maintenance / Main Burner

Warning: Turn off heater and let cool before cleaning.

After use, cleaning of the main burner may be required for the proper flame. The main burner may be cleaned by applying air pressure to the ports on the main burner.



Incorrect Main Burner Flame

Figure 37

Cleaning the Log Set and Firebox

During the annual inspection and maintenance appointment, the service person should clean dust, lint, and any light accumulation from the logs and the firebox area. An extra-soft brush should be used on the logs as they are extremely fragile; a vacuum cleaner may be used on the firebox. If at any time the logs cannot be removed or installed without forcing, the cause must be found. The logs must never be forced.

CAUTION: The ceramic logs are durable when handled and installed properly. However, they are delicate and may be damaged easily if not handled with care. Handling damage to the ceramic logs is not covered by warranty.

DO NOT HANDLE LOGS WHILE THEY ARE HOT. ALLOW PLENTY OF TIME FOR THE APPLIANCE TO COOL COMPLETELY BEFORE HANDLING.

OPERATING INSTRUCTIONS

CIDV-30 ON/OFF/REMOTE Switch

CIDV-30 is equipped with an ON/OFF/REMOTE switch which is located on the wiring chase. A wire harness is attached to the ON/OFF/REMOTE switch. The red, black and green (wires) female push-ons attach to the ON/OFF/REMOTE switch. At the opposite end of the wire harness, the black and green (wires) female push-ons attach to the gas valve. An additional green wire and the red wire, which are stripped and bare, will attach to the 750 millivolt wall thermostat accessory, or, to one of the other accessories that can be purchased for use with your log set.

Operation of ON/OFF/REMOTE Switch with no Accessories

To ignite main burner, turn the control knob on the gas valve from the PILOT position to the ON position. Turn the ON/OFF/REMOTE switch from the OFF position to the ON position. The additional green wire and red wire, which are stripped and bare are not used.

Operation of ON/OFF/REMOTE Switch with Accessories

750 Millivolt Wall Thermostat, GWSG-T

Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the wall thermostat. Turn the ON/OFF/REMOTE switch on the wiring chase to the REMOTE position. Set the wall thermostat to the desired temperature.

It is important to use wire of a gauge proper for the length of the wire:

RECOMMENDED WIRE GAUGES

Maximum Length	Wire Gauge
1' to 10'	18
10' to 25'	16
25' to 35'	14

Wall Switch, FWS-1

Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the wall switch. Turn the ON/OFF/REMOTE switch on the wiring chase to the REMOTE position. Pivot the rocker switch on the FWS-1 to the ON position.

Battery Operated Remote Control, FRBC-1 and FRBTC-1

Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the remote receiver that is a component in the FRBC-1 and FRBTC-1. Turn the ON/OFF/REMOTE switch on the wiring chase to the REMOTE position. Follow instructions in the FRBC-1 and FRBTC-1 to complete installation.

Note: If batteries fail in FRBC-1 or FRBTC-1, and immediate heat is desired, turn the ON/OFF/REMOTE switch on wiring chase from the REMOTE position to the ON position.

Electric (120 volt) Operated Remote Control, FREC-1

Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the wires on remote receiver that is a component in the FREC-1. Turn the ON/OFF/REMOTE switch on the wiring chase to the REMOTE position. Follow instructions in the FREC-1 to complete installation.

Note: If electric (120 volt) fails in FREC-1, and immediate heat is desired, turn the ON/OFF/REMOTE switch on wiring chase from the REMOTE position to the ON position.

Wiring of ON/OFF/REMOTE Switch with 750 Millivolt Wall Thermostat Accessory and Another Accessory

Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the 750 millivolt wall thermostat AND to the remote receiver that is a component in the FRBC-1, FREC-1 OR to the FWS-1, wall switch.

1. Connect (1) wire from the 750 millivolt wall thermostat and (1) wire from appropriate accessory to the GREEN, stripped and bare wire from the ON/OFF/REMOTE wire harness.
2. Connect (1) wire from the 750 millivolt wall thermostat and (1) wire from appropriate accessory to the RED, stripped and bare wire from the ON/OFF/REMOTE wire harness.

Note: When the appliance is in the MANUAL mode and the batteries fail in the FRBC-1 or if the electric (120 volt) fails in the FREC-1, and immediate heat is desired, turn the ON/OFF/REMOTE switch on wiring chase from the REMOTE position to the ON position.

Manual Operation

1. Turn ON/OFF/REMOTE switch on wiring chase to REMOTE position.
2. Turn wall thermostat OFF.
3. Turn accessory, FRBC-1, FREC-1 or FWS-1, ON. Appliance is now in the manual mode. You must turn the appliance ON or OFF with appropriate accessory.

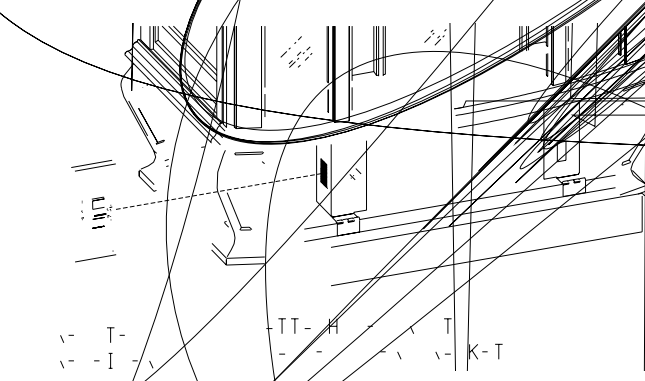
Wall Thermostat Operation

1. Turn the ON/OFF/REMOTE switch on wiring chase to REMOTE position.
2. Turn accessory, FRBC-1, FREC-1 or FWS-1, OFF.
3. Turn wall thermostat ON and set appropriate temperature. Wall thermostat will cycle the appliance ON and OFF.

Installation of Remote Receiver (Figure 38)

1. Attach, from left to right, the slide-on cover plate onto the remote receiver. **ON** will be to the top and **OFF** will be to the bottom on the slide-on cover plate.
2. Push the receiver slide button onto the receiver slide switch. Reverse installation of the slide button if it is off center.
3. Attach velcro loop on the left side of the valve cover support.
4. Attach velcro hook onto remote receiver. The word **TOP** on the remote receiver should be to the top when installed onto valve cover support.
5. Attach velcro hook on remote receiver onto velcro loop on valve cover support.

Wiring Diagram (Figure 39)



Initial Lighting (Figure 40)

Upon completing the gas line or turning the gas valve "ON" after it has been in the "OFF" position, a small amount of air will be in the lines. When first lighting the appliance, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the appliance will light and operate satisfactorily.

Subsequent lightings of the appliance will not require such purging if the gas valve is not turned to "OFF."

Standing Pilot Operation

1. Follow the SAFETY and LIGHTING INSTRUCTIONS for standing pilot controls found in this manual and on labels found attached to the appliance.

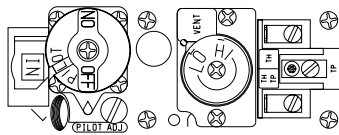
CAUTION: During the initial purging and subsequent lightings, never allow the gas valve control knob to remain depressed in the "pilot" position without pushing the piezo ignitor button at least once every second.

2. During the heating season, leave the control valve knob in the "ON" position. This will allow the pilot flame to remain lit. Turn the burner flame on or off with the appliance ON/OFF rocker switch, wall switch, remote control kits or 750 millivolt wall thermostat.

NOTE: The gas control valve allows you to increase or decrease the height of the main burner flame. The control valve has a pressure regulator with a knob as shown in Figure 40. Rotate the knob clockwise to "HI" to increase the flame height and counterclockwise to "LO" to decrease the flame height.

3. When the heating season is over, turn the on/off switch to "OFF" and the control valve to "OFF". The system, including the pilot light, will be shut down.

VARIABLE REGULATOR



ROTATION

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the fire department.

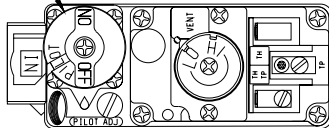
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.

- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

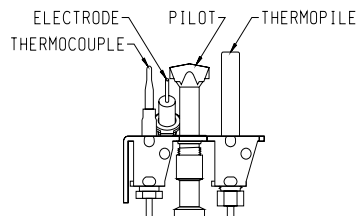
LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information above.
2. Set the thermostat to lowest setting.
3. Turn off all electric power to the appliance (if applicable).
4. Lower valve cover.
5. Push in gas control knob slightly and turn clockwise to "OFF".

GAS CONTROL KNOB SHOWN IN "OFF" POSITION.



6. Wait ten (10) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information above. If you don't smell gas, go to the next step.
7. Find pilot - The pilot is attached to the main burner behind the front log.



8. Turn knob on gas control counterclockwise to "PILOT".
9. Push in gas control knob all the way and hold in. Repeatedly push the piezo ignitor button until pilot is lit. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
 - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
10. Turn gas control knob counterclockwise to "ON".
11. Raise valve cover.
12. Turn on all electric power to the appliance (if applicable).
13. Set thermostat to desired setting.

TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to lowest setting.
2. Turn off all electric power to appliance if service is to be performed (if applicable).
3. Lower valve cover.
4. Push in gas control knob slightly and turn clockwise to "OFF". Do not force.
5. Raise valve cover.

STANDING PILOT-TROUBLE SHOOTING

With proper installation and maintenance, your new Direct Vent Fireplace should provide years of trouble-free service. If you do experience a problem, refer to the Trouble Shooting Guide below. This guide will assist a qualified service person in the diagnosis of problems and the corrective action to be taken.

- 1. Spark ignitor will not light pilot after repeated depressing of piezo ignitor button.**
 - a. Defective ignitor (no spark at electrode) - Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor.
 - b. No gas or low gas pressure.
 - Check remote shut off valves from fireplace. Usually there is a valve near the main. There can be more than one (1) valve between the fireplace and main.
 - Low pressure can be caused by a variety of situations such as a bent line, too narrow diameter of pipe, or low line pressure. Consult with plumber of gas supplier.
 - c. No LP in tank.
 - Check LP (propane) tank. Refill tank.
- 2. Pilot will not stay lit after carefully following lighting instructions.**
 - a. Defective thermocouple.
 - Check that pilot flame impinges on thermocouple. Clean and/or adjust pilot for maximum flame impingement.
 - Ensure that the thermocouple connection at the gas valve is fully inserted and tight (hand tight plus 1/4 turn) faulty thermopile if reading is below specified minimum.
 - Disconnect the thermocouple from the valve, place one millivolt meter lead wire on the tip of the thermocouple and the other meter lead wire on the thermocouple copper lead. Start the pilot and hold the valve knob in. If the millivolt reading is less than 15 mv, replace the thermocouple.
 - b. Defective valve.
 - If thermocouple is producing more than 15 millivolts, replace faulty valve
- 3. Pilot burning, no gas to burner, valve knob "ON", on/off switch "ON."**
 - a. "On/Off" switch, wall switch, or wires defective.
 - Check "on/off" switch and wires for proper connections. Place jumper wires across terminal at switch - if burner comes on, replace defective switch. If OK, place jumper wires across switch wires at gas valve-if burner comes on, wires are faulty or connections are bad.
 - b. Thermopile may not be generating sufficient milli-voltage.
 - If the pilot flame is not close enough physically to the thermopile, adjust the pilot flame.
 - Be sure the wire connections from the thermopile at the gas valve terminals are tight and the thermopile is fully inserted into the pilot bracket.
 - Check the thermopile with a millivolt meter. Take the reading at TH-TP & TP terminals of the gas valve. The meter should read 325 millivolts minimum, while holding the valve knob depressed th the pilot position, with the pilot lit, and the ON/OFF switch in the OFF position. Replace the faulty thermopile if the reading is below the specified minimum.
 - With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 325 millivolts minimum. Replace the thermopile if the reading is below the minimum.
 - c. Defective valve.
 - Turn valve knob to "ON." Place ON/OFF switch to "ON." Check with millivolt meter at thermopile terminals. Millivolt meter should read greater than 100 M.V. If the reading is okay and the burner does not come, replace the gas valve.
 - d. Plugged main burner orifice.
 - Check main burner orifice for blockage, clean main burner orifice.
- 4. Frequent pilot outage problem.**
 - a. Pilot flame may be too high or too low, or blowing (high), causing pilot safety to drop out.
 - Clean and adjust flame for maximum flame impingement on the thermocouple. Follow lighting instructions carefully.
- 5. The pilot and main burner extinguish while in operation.**
 - a. No LP (Propane) in tank.
 - Check LP (Propane) tank. Refill fuel tank.
 - b. Inner vent pipe leaking exhaust gases back into system.
 - Check for leaks.
 - c. Glass too loose, gasket leaks in corners after usage.
 - Be certain glass assembly is installed correctly and tighten corner.
 - d. Horizontal vent improperly pitched.
 - The horizontal vent cap should slope down only enough to prevent any water from entering the unit. The maximum downwarda slope is 1/4 inch.
 - e. Bad thermopile or thermocouple.
 - Replace if necessary.
 - f. Improper vent cap installation.
 - Check for proper installation and freedom from debris or blockage.
- 6. Glass soots.**
 - a. Flame impingement on logs.
 - Adjust the log set so that the flame does not excessively impinge on it.
 - b. Improper air shutter adjustment.
 - Adjust the air shutter.
- 7. Flame lifts off main burner.**
 - a. Insufficient oxygen being supplied.
 - Check to make sure vent cap is installed properly and free of debris. Make sure that vent system joints are tight and have no leaks.
 - Check to make sure that no material has been placed at the burner base.
 - Be sure glass is tightened properly on unit, particularly on top corners.

PLEASE NOTE: When ordering parts, it is very important that **part number** and **description** of part coincide.

Index No.	Part Number	Description	Index No.	Part Number	Description
1	R-3436	REMOTE/OFF/ON SWITCH	32	CI-361	INNER BOTTOM ASSEMBLY
2	CI-329	WIRE CHANNEL	33	M-164	GASKET - MANIFOLD
3	CI-331	CHANNEL DIVIDER	34	M-157	GASKET - SEAL BRACKET
4	CI-330	CASING SUPPORT	35	DVF-039	SEAL BRACKET
5	CI-307	REAR COVER	36	CI-257	AIR SHUTTER BODY
6	M-160	GASKET - VENT ELBOW	37	CI-023	BURNER BRACKET - RIGHT
7	CI-332	AIR DROP ASSEMBLY	38	R-3758	ADJUSTING SCREW
8	CI-364	RELIEF DOOR ASSEMBLY	39	CI-025	AIR SHUTTER TOP
9	CI-375	RELIEF DOOR BRACKET (2 REQUIRED)	40	R-5278	BURNER
10	CI-363	INNER TOP ASSEMBLY	41	CI-022	BURNER BRACKET - LEFT
11	CI-273	GLASS FRAME SUPPORT TOP	42	R-3473	THERMOCOUPLE
12	M-163	FLUE CONNECTOR TUBE GASKET (3 REQUIRED)	43	CI-018	PILOT TUBING
13	CI-274	SIDE SHIELD (2 REQUIRED)	44	R-5285	THERMOPILE
14	CI-275	INNER BODY	45	R-3465	PILOT WITH ORIFICE (NAT ONLY)
15	CI-324	INTERNAL BAFFLE	45	R-3466	PILOT WITH ORIFICE (LPG ONLY)
16	CI-355	GLASS ASSEMBLY - SIDE (2 REQUIRED)	46	CI-338	LOG SUPPORT ASSEMBLY
17	CI-356	GLASS ASSEMBLY - FRONT	47	R-3642	FRONT LOG
18	CI-354	GLASS FRAME ASSEMBLY	48	R-3644	TOP LOG
19	R-2708	PIEZO IGNITOR	49	R-3643	REAR LOG
20	CI-143	VALVE COVER ASSEMBLY	NOT SHOWN	R-5143	PILOT ASSEMBLY - NAT. WITH THERMOPILE THERMOCOUPLE
21	CI-253	MAGNET ASSEMBLY (2 REQUIRED)	NOT SHOWN	R-5144	PILOT ASSEMBLY - LPG WITH THERMOPILE THERMOCOUPLE
22	R-3318	GAS VALVE - NAT	NOT SHOWN	CI-350	CABLE ASSEMBLY (DELAYED IGNITION RESET SWITCH)
22	R-3319	GAS VALVE - LPG	NOT SHOWN	R-3766	WIRE ASSEMBLY (DELAYED IGNITION RESET SWITCH)
23	R-1259	3/8 NPT X 3/8 NPT STREET ELBOW	NOT SHOWN	R-3765-A	WIRE ASSEMBLY
24	CI-016	MANIFOLD ASSEMBLY	NOT SHOWN	R-4505	TUBE OF FURNACE CEMENT
25	P-86-38N	ORIFICE-NAT	NOT SHOWN	* CI-007	RETAINING TAB (4 REQUIRED)
25	P-86-54L	ORIFICE-LPG	NOT SHOWN	* R-3747	LEVELING BOLT (4 REQUIRED)
26	* CI-008	LEG PAD-A (2 REQUIRED)	NOT SHOWN	CI-235	RESTRICTOR PLATE USED IN A VERTICAL RISE BETWEEN 15' AND 25'
27	* CI-009	LEG PAD-B (2 REQUIRED)			
28	CI-272	GLASS FRAME GUIDE			
29	CI-362	INNER BOTTOM FACE ASSEMBLY			
30	CI-145	DELAYED IGNITION RESET SWITCH ASSEMBLY			
31	R-4053	DOOR LATCH (2 REQUIRED)			

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH.

How To Order Repair Parts . . .

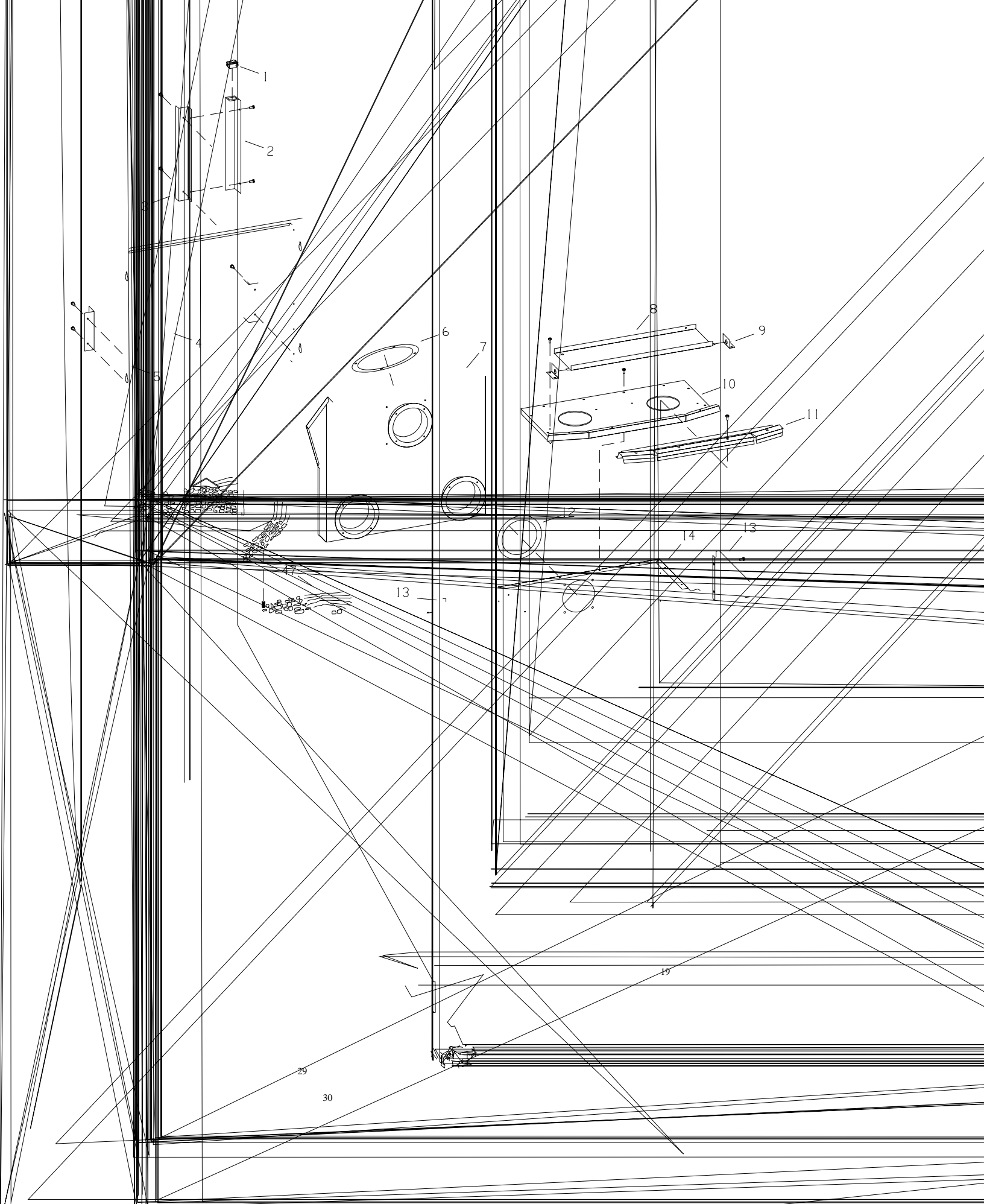
Parts can be ordered **only** through your **service person or dealer**. For best results, the **service person or dealer** should order parts through the distributor. Parts can be shipped directly to the **service person/dealer**.

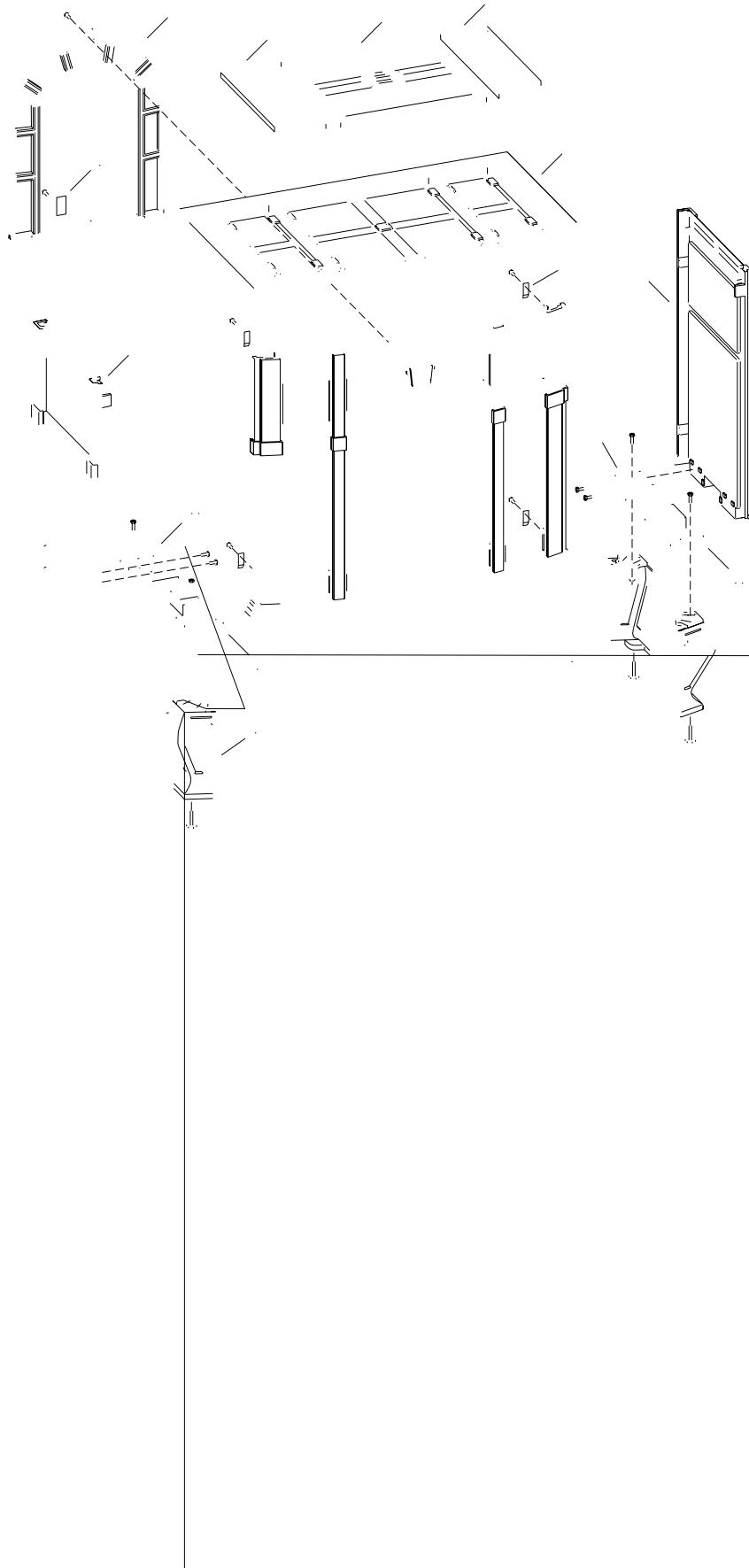
All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number from the name plate on your equipment. Then determine the Part Number (**not** the Index Number) and the Description of each part from the following appropriate illustration and list. Be sure to give all this information . . .

Heater Model Number _____ Part Description _____
 Heater Serial Number _____ Type of Gas (Propane or Natural) _____
 Part Number _____

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

Shipments contingent upon strikes, fires and all causes beyond our control.







OPTIONAL BLOWER CIB-2 Direct Vent Fireplace CIDV-30

Installing Optional CIB-2 Blower

1. Loosen, but do not remove, (4) hex-head screws located on the exterior, bottom of the appliance.
2. Position the blower assembly at the rear of the appliance. The blower assembly has (4) keyholes for attachment to the exterior, bottom of the appliance.
3. Place the large diameter holes in the keyholes over and behind the (4) hex-head screws that were loosened in Step 1. Push inward on the blower assembly to lock the keyholes into position behind the screws. Tighten (4) hex-head screws to secure blower assembly to exterior, bottom of the appliance.
4. Remove wire channel from channel divider by removing (2) 10 x 1/2" screws. **Note:** If optional blower is being installed during initial installation of appliance, the wire channel will not be attached to rear cover. (Refer to **Installation of Wire Channel Assembly**, Page 9)
5. Remove channel divider from rear cover by removing (2) 10 x 1/2" screws.
6. Attach fan control to OFFSET, fan control bracket (Part 9B, Page 28) with (2) 6 x 1/4" screws provided in hardware package.
7. Attach fan control with bracket onto air drop with (2) 10 x 1/2" screws provided in hardware package.
8. Route fan control wires through 1/2" extruded hole on channel divider. Attach fan control wires to fan control.
9. Attach channel divider with (2) 10 x 1/2" screws from Step 5.
10. Route wires from fan control and ON/OFF/REMOTE switch within wire channel.
11. Attach wire channel to channel divider with (2) 10 x 1/2" screws from Step 4. (Refer to **Installation of Wire Channel Assembly**, Page 9)
12. Insert AUTO/OFF/ON switch into rectangular notch on valve bracket. Be sure to insert AUTO/OFF/ON switch with letters (words) upright. (See wiring diagram)
13. Attach 1/4" push-on terminal from blue wire on the fan control to the AUTO (top) tab on the switch.
14. Attach 1/4" push-on terminal from black wire to the OFF (middle) tab on the switch.
15. Attach 1/4" push-on terminal from white wire on the fan control to the ON (bottom) tab on the switch.
16. Installation of optional CIB-2 blower is completed.

Fan Control

The fan control is a non-adjustable automatic type. The fan control will require between 5 and 10 minutes of main burner operation before the fan control "closes" and activates the blower. The blower will continue to run between 5 and 10 minutes after the main burner shuts off, before the fan control "opens" and deactivates the blower.

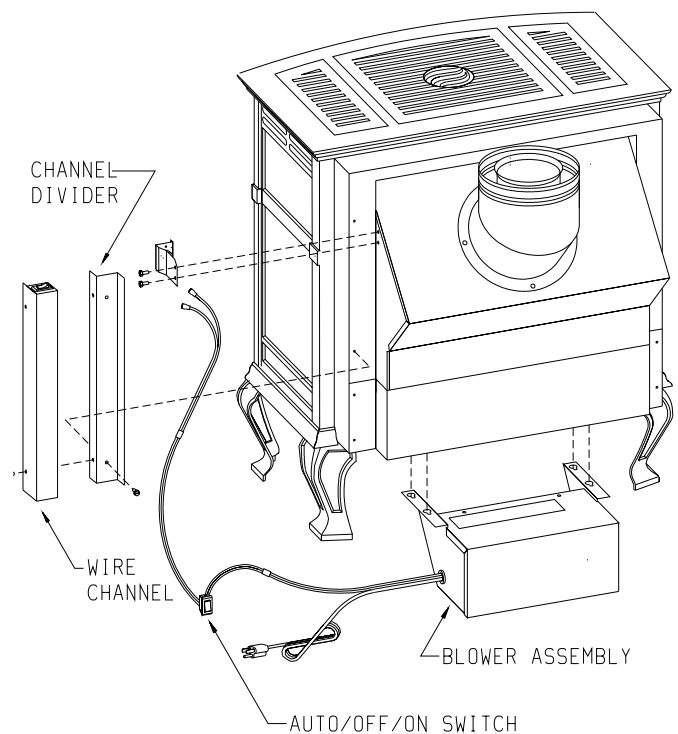
Wiring

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70* or *Canadian Electrical Code, CSA C22.1*, if an external electrical source is utilized. **This appliance is equipped with a three-prong [grounding] plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.** For an ungrounded receptacle, an adapter, which has two prongs and a wire for grounding, can be purchased, plugged into the ungrounded receptacle and its wire connected to the receptacle mounting screws. With this wire completing the ground, the appliance cord plug can be plugged into the adapter and be electrically grounded.

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

WARNING:

Unplugging of blower accessory will not stop the heater from cycling. To shut heater off: Turn temperature dial or thermostat to lowest setting. Turn knob on gas control to "OFF", depressing slightly. Do not force.

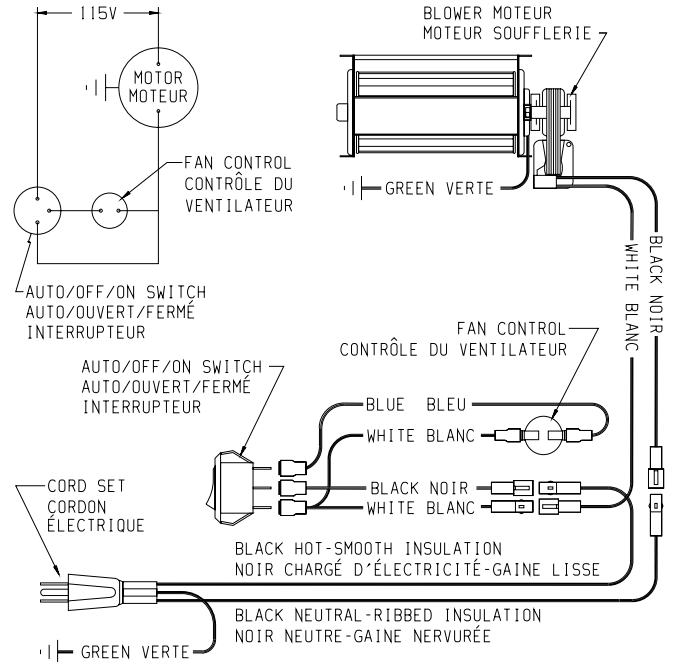
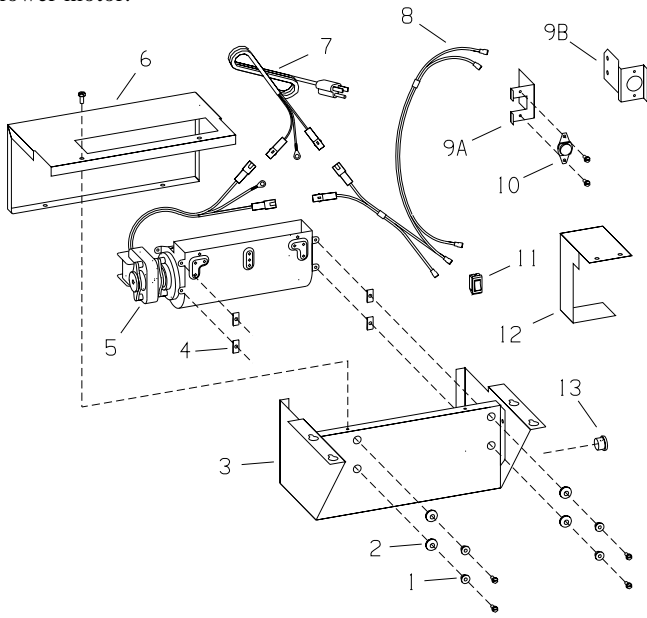


Cleaning

The blower wheel will collect lint and could require cleaning once a year. If the air output decreases or the noise level increases, it indicates a dirty wheel.

Blower Motor

The blower motor does not have oiling holes. Do not attempt to oil blower motor.



IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THIS UNIT MUST BE REPLACED, IT MUST BE REPLACED WITH NO. 18, 150°C WIRE OR ITS EQUIVALENT.

PARTS LIST

Index No.	Part No.	Description
1	R-1454	Brass Bushing (4 Required)
2	R-1499	Rubber Grommet (4 Required)
3	CI-002	Blower Housing
4	R-1517	Tinnerman Clip (4 Required)
5	R-2804-A	Blower Assembly
6	CI-003	Blower Housing Cover
7	R-2099	Cord Set
8	R-3767-A	Wire Harness
9A	CI-004	Fan Control Bracket (Use with CIBV-30, CIVF-25, CIVF-25C Only)
9B	CI-325	Fan Control Bracket (Use with CIDV-30 Only)
10	R-2503	Fan Control
11	R-2805	Auto/Off/On Switch
12	CI-220	Fan Control Shield (Use with CIVF-25 only)
13	R-1410	Bushing 7/8" D